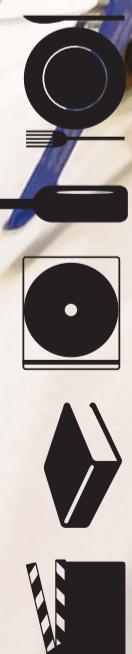




# Gravity

The European Space Agency launched a rocket carrying two cubes of gold and platinum. What may sound like a frivolous enterprise is actually the prelude to a far more ambitious mission that's hoped will measure ripples in space-time caused by black holes and other massive objects lurking unseen in dark corners of the galaxy. Also known as gravitational waves, these ripples were predicted by Albert Einstein a century ago but have never been directly detected ■ X3



- MOVIES: CHI-RAQ
- BOOKS: THE GIRL IN THE ICE BY LOTTE AND SOREN HAMMER
- MUSIC: SONGS IN THE DARK BY THE WAINWRIGHT SISTERS
- WINE: THE RUSSIAN EMBLEM
- FOOD: VARIATIONS OF RED

## DRIVE IN

Jake Coyle, AP Film Writer

### SPIKE LEE'S BLISTERING 'CHI-RAQ' BURNS WITH RAGE

**M**ore alive than most of the year's films put together, Spike Lee's "Chi-Raq" is urgent agitprop that pulsates with unalloyed rage for the "self-inflicted genocide" of South Chicago and explodes with full-hearted (and gloriously lewd) pleas for peace.

It's wildly uneven but it is wild. There's plenty here to quibble with (the film's title prompted outrage in Chicago), but unsailable is its passion to bring attention and compassion to Chicago's blood-soaked streets. "This is an emergency" flashes across the screen early in "Chi-Raq," a hip-hop musical and a social satire that Lee co-wrote with Kevin Willmott ("C.S.A.: The Confederate States of America") and sets to the beat of Terence Blanchard's score. It's an updating of Aristophanes' ancient Greek comedy "Lysistrata," in which Athenian women wage a sex strike against their warrior men to end the Peloponnesian War. Lee and Willmott have transplanted the tale to Chicago, where the murder rate has far surpassed

the number of Americans killed in Iraq.

Lee is best as a megaphone for street-level outrage. Whereas most filmmakers gradually ebb in spiritedness as they age, Lee — in good and not-so-good films — has remained uniquely unpredictable and remarkably prolific. His last great film, 2006's "When the Levees Broke: A Requiem in Four Acts," fed off the fury of New Orleans residents after Hurricane Katrina.

"Chi-Raq," which takes its title from the controversial nickname for the violence-plagued city, is Lee's most vital film at least since then. It's a farce, wrapped heavily in stylistic overtures, with maybe a half-dozen introductions to Chicago and to "Chi-Raq," including Nick Cannon's "Pray 4 My City," played with lyrics blazed across the screen, and Samuel Jackson's pimplike narrator, Dolmedes, who raps, "We can't take this much more."

The story takes a long time to arrive, and when it does, it and the characters remain se-

condary to the overall frenzy of the movie, all of which is in rhyming verse. Here, Lysistrata is played by Teyonah Parris ("Dear White People"). She's the girlfriend of Cannon's gun-toting gangbanger, also named Chi-Raq. His gang is the Spartans, while the Trojans are led by Wesley Snipes' Cyclops. Inspired by the Liberian activist Leymah Gbowee, Lysistrata organizes a "total abstinence from knocking the boots" among the women of the Spartans and Trojans to stop the gang warfare.

Many scenes aren't about strictly advancing the story line but rather deepening the pain, outrage and absurdity. Particularly good is Dave Chappelle's cameo, in which he, at a strip club, frets about "the penis power grid" being shut down. Some scenes don't work, particularly a cartoonish one with a racist Dixieland general (David Patrick Kelly), who ends up straddling a Civil War cannon in Confederate flag underpants. John Cusack as the Rev. Mike Corridan, who preaches at a fu-

AP PHOTO



Nick Cannon as Chi-Raq in Spike Lee's film, "Chi-Raq"

neral, is jarringly bad casting. There's also a lingering feeling that in bringing the gender roles of ancient Greece to present-day South Chicago, Lee has reduced modern women to sex objects (albeit empowered ones) and men to libido-driven dogs.

But the outrageousness — the

madness — is the point. In Chicago, Lee sees a seemingly helpless, tragic situation and he's marshalled all of himself — every ridiculous rhyme, every bit of bombast — for a truly impassioned film. By the time "Chi-Raq" reaches its powerful climax, he has made a sensational, stirring case for love, not war.

"Chi-Raq," an Amazon Studios and Roadside Attractions release, is rated R by the Motion Picture Association of America for "strong sexual content including dialogue, nudity, language, some violence and drug use." Running time: 127 minutes. ★★★★★

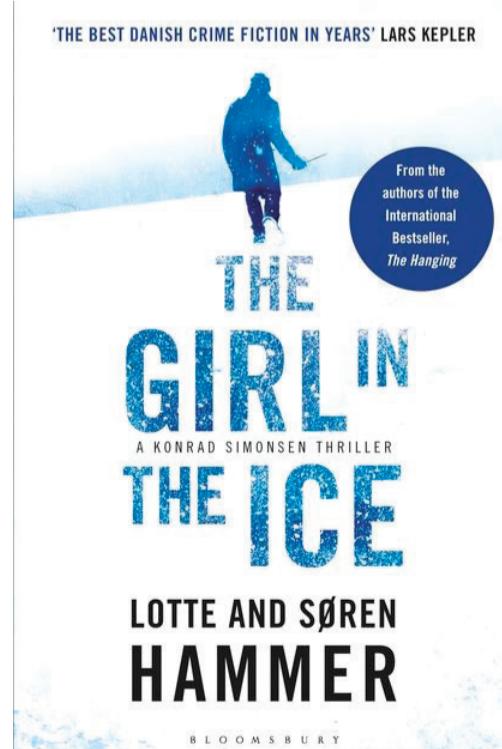
## BOOK IT

### DETECTIVES DIG UP FROZEN CLUES IN 'THE GIRL IN THE ICE'

When homicide chief Konrad Simonsen is called to investigate the murder of a woman whose body was concealed in ice for 25 years in Greenland's vast, brutal landscape, he quickly notices some eerie resemblances between the victim and the body of a woman from a recent murder case: long black hair, early 20s, high cheekbones and oddly clipped fingernails. The similarities lead the detective to realize that not only did he peg the wrong man on a recent case, but that the real killer is still at large. Thus begins a tireless investigation to determine if there are more victims, the identity of the murderer and whether he will kill again in "The Girl in the Ice" by Lotte and Soren Hammer.

As Simonsen briefs his team on the facts, each detective develops leads and speculations. Some prove fruitful; others prove dangerous. One detective visits a clairvoyant woman whose skills can only sometimes be trusted, while a younger addition to the homicide team tries desperately to solve the case on her own. Then, when a possible connection is discovered between one of the victims and a political figure, the case grows more complicated.

Intertwined in the plot are the obscure relationships among the team. Simonsen maneuvers



"The Girl in the Ice" (Bloomsbury USA), by Lotte and Soren Hammer

a hazy, undefined fling with his top investigator, the Countess, and one newbie isn't above flirting to get what she wants out of potential witnesses.

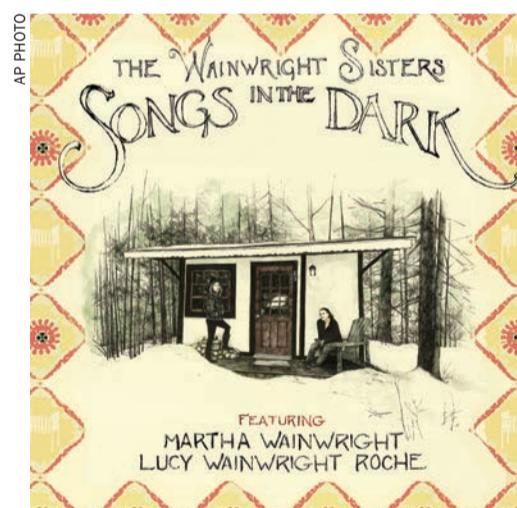
Any roadblocks the detectives hit in the case are tidied up quickly by a helpful cast of extras. A computer genius sits ready to dig up background details on

suspects, and political figures provide hidden dirt from years past. While some scenes tend to spoon-feed readers into accurately calculating what will happen next, there are enough false and tangled trails to keep the guessing game going until the end.

Christina Ledbetter, AP

## tTUNES

### WAINWRIGHT SISTERS KEEP IT IN THE FAMILY



The Wainwright Sisters, "Songs in the Dark" (PIAS)

"Songs in the Dark," which Martha Wainwright has described as an album of "creepy, morbid lullabies."

Recorded at a family cabin in the Quebec woods, the album is a mix of traditional folk tunes and new takes on songs by the likes of Cindy Walker, Townes Van Zandt and Paul Simon — the sisters make "El Condor Pasa," popularized by Simon & Garfunkel, both languid and fierce.

There are several compositions by members of the sisters' own family, including Kate McGarrigle's wistful "Lullaby for a Doll," written about Martha, and "Runs in the Family" by Roche's aunt, Terre Roche.

The sisters' complementary voices — Roche's a little sweeter, Wainwright's a little wilder — soar over spare arrangements to create a mood that's by turns soothing, sinister and spooky. Special mention should go to Eloï Painchaud, whose haunting harmonica ripples through several tracks.

Many of the songs are about children, but they are anything but cozy. Family life is a journey into the deep, dark woods on songs like Loudon Wainwright's sardonic "Lullaby" — in which an exhausted parent implores, "Shut up and go to bed" — and Richard Thompson's "End of the Rainbow," which advises, "There's nothing at the end of the rainbow, there's nothing to grow up for anymore." Sweet dreams.

Jill Lawless, AP

## NEWS OF THE WORLD

Frank Jordans, Berlin, AP

# Probe will test technology to detect ripples in space-time

The European Space Agency yesterday launched a rocket carrying two cubes of gold and platinum almost a million miles from Earth so that scientists can see how they'll behave in free fall — at a cost of more than USD450 million.

In order for that mission — tentatively scheduled for launch in 2034 — to succeed, the European Space Agency first has to test whether it can shield objects from external influences well enough to measure the minute effects of gravitational waves.

"We want to see whether we can create an environment in orbit that's free of interference, and where we can conduct these high-precision measurements," said Michael Menking, senior vice president for Earth observation, navigation and science at Airbus Defense and Space. The company is the main technology contractor on the LISA Pathfinder mission.

The probe separated from the Vega rocket two hours after its launch from ESA's space port in French Guiana at 0404 GMT yesterday.

"We have a mission," project scientist Paul McNamara said to cheers and hugs at the con-

AP PHOTO



This Nov. 16 photo provided by European Space Agency ESA shows the LISA Pathfinder being encapsulated within the half-shells of the Vega rocket fairing on at the Centre Spatial Guyanais in Kourou, French Guiana

trol rooms in Kourou and Darmstadt, Germany, after receiving the first signal from the spacecraft.

By mid-January the probe will

have reached an orbit about 1.5 million kilometers from Earth, where the pull from the planet's gravity is balanced by that of the sun. The cubes — made from gold and platinum to reduce their susceptibility to magnetic fields — are then carefully released inside a box that shields them from cosmic particles and other interference which might affect the measurements performed by a sensitive laser. The laser is capable of detecting movements of less than 10 millionths of a millionth of a meter.

"Our biggest enemy is the light from the sun that hits the satellite and pushes it around," said Oliver Jennrich, a scientist working on the LISA Pathfinder mission.

To counter this, the satellite uses NASA-supplied thrusters capable of making tiny corrections to the probe's position to keep it in the right orbit and prevent the free-falling cubes from crashing into the inside of the box.

This should provide a near-perfect cosmic isolation chamber to measure the effect of gravitational waves, said Jennrich. The LISA Pathfinder mission itself won't detect any gravitational waves though. Because the two 2-kilogram cubes are only 38 centimeters apart any object big enough to affect their relative position would have to be so huge that it would be visible with the naked eye, said Jennrich.

Instead, the real measurements will likely have to wait almost

two decades for the follow-up mission, provisionally called LISA. It will involve three satellites positioned in a triangle five million kilometers apart from each other. Together they should be able to detect gravitational waves caused by enormous objects such as supermassive black holes, like the one that's thought to sit at the center of the Milky Way.

Jennrich said measuring gravitational waves would also allow scientists to peer through the dust and debris that obscures much of what's going on at the center of the galaxy. By the time LISA is launched, ground-based experiments may have already succeeded in detecting gravitational waves for

the first time, said Toby Wiseman, a physicist at Imperial College, London, who isn't involved with the space project. But because of the interference they suffer from on Earth, ground-based experiments will likely be limited to measuring the extreme bursts of gravitational waves that occur during rare, dramatic events.

"Space-based gravitational wave detectors will detect gravitational waves that are not accessible by any other experiment: massive black holes at the center of galaxies colliding and merging into a larger black hole; smaller black holes swirling around massive black holes before falling in; and pairs of white dwarfs in our galaxy," said Gabriela Gonzalez, a professor of physics and astronomy at Louisiana State University who works on the LIGO detector near Livingston, Louisiana.

"It's probably the most challenging mission we're doing in the science program, because the precision by which you need to measure the test mass position is very, very high," said Arvind Parmar, head of the European Space Agency's scientific support office.

Further scientific advances need to be made over the next decade before a decision is made in 2024 whether to go ahead with the LISA mission, said Parmar. Still, scientists have great hopes for what that probe might eventually reveal.

"Actually, what will be really exciting is finding the things we don't know about yet," said Parmar.

**It's probably the most challenging mission... because the precision by which you need to measure the test mass position is very, very high.**

ARVIND PARMAR  
EUROPEAN SPACE AGENCY

AP PHOTO



The liftoff of Vega VV06 rocket carrying LISA Pathfinder

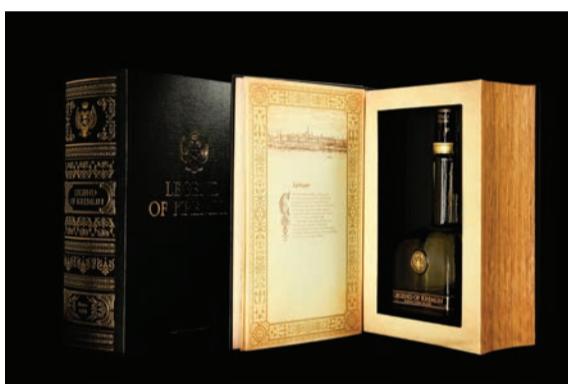
## WORLD OF BACCHUS

Jacky I.F. Cheong



### KREMLEVKA CLASSIC

Made entirely with Russian wheat, distilled and multiple-filtered. Spotlessly clean and thoroughly transparent, the nose is expressive and nearly floral, effusing fresh grains, birch sap and hints of citrus peel. The mouthfeel is particularly smooth, with excellent depth and length, remarkable purity and good consistency. Bottled at 40%, the fresh entry persists through a sweetish mid-palate, leading to a citrusy finish. Excellent on its own, it can also be used in mixed drinks.



### LEGEND OF KREMLIN

Made with top quality Russian wheat, distilled and filtered five times. Immaculately clean and perfectly transparent, the nose is effortlessly poised and pristine, emanating springwater, wet stone and traces of crystal sugar. The mouthfeel is distinctly creamy, with extraordinary depth and length, crystal-clear purity and elegant composure. Bottled at 40%, the restrained entry evolves into a spirited mid-palate, leading to a cleansing finish. To fully appreciate this fine vodka, it is best served neat. Packaged in an award-winning folio-like gift box, this is a collectible.

## The Russian Emblem

By far the single largest country in the world, Russia spans from 41st to 82nd parallels north. Barring its limnophore regions bordering Azerbaijan, Georgia and Ukraine as well as along the Black Sea and the Caspian Sea, much of Russia is simply too cold for vine and wine. To quench the mighty thirst that unites mankind, Russia opted to specialise in vodka. So important is vodka in the Russian national psyche, that during the hours of extremity at the Battle of Stalingrad (1942-1943), when food and supplies had to be airdropped to the encircled Soviet troops, vodka bottles were parachuted.

What we now refer to as vodka is spelt in various ways and goes by various names along the vodka belt, of which Russia is a proud member-state. Before the invention of distillation in the 8th century and the propagation thereof, undistilled and naturally fermented vodka rarely exceeded 14% ABV. The word "vodka" is a diminutive form of "voda" (literally: water), bearing an uncanny semantic resemblance to aqua vitae, eau-de-vie and whisky / whiskey (from Gaelic uisce beatha / uisge beatha), all meaning "water of life".

The genesis of vodka is a subject of heated debate, sometimes with nationalist overtones. Due to scarce documentation, no one knows for certain whether it originated from 8th century Poland or 9th century Russia. In 1174, the first mention of a distillery – presumably one which produced vodka – appeared in Russia, but in 1405, vodka made its written débüt in Polish, which has always adopted the Latin alphabet; for vodka to make its Cyrillic entrance, Russia had to wait until 1533.

In 1430, Orthodox monk Isidore created the first authentic recipe of Russian vodka in the Chudov Monastery of the Moscow Kremlin, a feat whi-

ch was recognised by international arbitration in 1982. As elsewhere in Europe, clergymen and monasteries often played a pivotal role in advancing imbibing techniques. For centuries, vodka was produced only in the Grand Duchy of Moscow, thereby acquiring a Muscovite image. During the reign of Elizabeth of Russia, in 1751, imperial decrees were issued to regulate distilleries. Before WWI, vodka was an important source of government tax revenue. Prior to the end of WWII, vodka used to be a distinctly Slavic drink, but since the 1970s, it has become thoroughly international and is now the most popular spirit on earth.

Vodka can be made of a wide range of ingredients such as corn, potato, rice, sorghum, soya bean and sugar beet etc, provided that they contain sufficient starch and sugar, but rye and wheat remain the most important and are responsible for high quality vodkas. Of all alcoholic drinks in the world, vodka is unique in its relentless emphasis on purity achieved by filtration. Subsequent to multiple distillations, the liquor often reaches 95% ABV and is then filtered through activated charcoal to remove any residual impurities. The best vodka is supposed to be completely colourless and odourless, but the paradox is that the perfect vodka would hence be tasteless, as it contains merely ethanol and alcohol. Vodka is usually watered down to around 40% ABV before bottling. It has no maturation, but added flavourings e.g. fruits or herbs are permissible.

To discover the finest Russian vodkas, contact Ms Bolormaa Ganbold of PREM1ER Hospitality Management and PREM1ER BAR & LOUNGE; W: www.premiergroupworld.com; E: bolor@premiergroupworld.com; T: +853 6233 5262; A: 86, Rua Direita Carlos Eugénio, Old Taipa Village.

Jacky I.F. Cheong is a legal professional by day and columnist by night. Having spent his formative years in Britain, France, and Germany, he regularly writes about wine, fine arts, classical music, and politics in several languages

## RESTAURANTS

### CANTONESE



#### GRAND IMPERIAL COURT

10.00 - 23.00  
T: 88022539

Level 2, MGM MACAU



#### IMPERIAL COURT

Mon - Friday  
11:00 - 15:00 / 18:00 - 23:00  
Sat, Sun & Public Holidays  
10:00 - 15:00 / 18:00 - 23:00  
T: 8802 2361

VIP Hotel Lobby, MGM MACAU

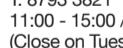


#### BEIJING KITCHEN

Level 1, Grand Hyatt Macau

Opening Hours

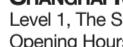
11:30am - 24:00



**KAM LAI HEEN**  
Grand Lapa, Macau  
956-1110 Avenida da Amizade, 2/F  
T: 8793 3821

11:00 - 15:00 / 18:00 - 22:00

(Close on Tuesday)



**SHANGHAI MIN**  
Level 1, The Shops at The Boulevard  
Opening Hours

11:00 - 15:00; 18:00 - 22:30



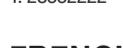
#### SHANGHAI

#### CATALPA GARDEN

Mon - Sunday  
11:00 - 15:00 / 17:30 - 23:00  
Hotel Royal, 2-4

Estrada da Vitoria

T: 28552222



#### FRENCH



**AUX BEAUX ARTS**  
Tue - Fri: 18:00 - 24:00  
Sat & Sun: 11:00 - 24:00  
Closed every Monday  
T: 8802 2319

Grande Praça, MGM MACAU

### GLOBAL

#### HARD ROCK CAFE

Level 2, Hard Rock Hotel  
Opening Hours  
Monday to Sunday : 11:00 - 02:00  
Sunday : 10:00 - 02:00

#### CAFÉ BELA VISTA

Grand Lapa, Macau  
956-1110 Avenida da Amizade, 2/F  
T: 87933871  
Mon - Thurs  
06:30 - 15:00 / 6:00 - 22:00  
Fri - Sunday  
06:30 - 22:00

#### MEZZA9 MACAU

Level 3, Grand Hyatt Macau  
Opening Hours  
Dinner: 5:30 - 11:00



**VIDA RICA (RESTAURANT)**  
2/F, Avenida Dr Sun Yat Sen, NAPE  
T: 8805 8918

Mon - Sunday  
6:30 - 14:30 / 18:00 - 23:00



**MORTON'S OF CHICAGO**  
The Venetian(r) Macao-Resort-Hotel  
Taipa, Macau  
T: 853 8117 5000  
mortons.com

- Bar
- Open daily at 3pm
- Dining Room
- Monday - Saturday: 13:00 - 23:00
- Sunday: 17:00 - 22:00

#### ABA BAR

**ABA BAR**  
Tue-Sun: 17:00 - 24:00  
Closed every Monday  
Grande Praça, MGM MACAU



**MGM PASTRY BAR**  
10:00 - :00  
T: 8802 2324  
Main Hotel Lobby, MGM MACAU



#### Rossio

Mon - Sun: 07:00 - 23:00  
T: 8802 2385

Grande Praça, MGM MACAU



#### SQUARE EIGHT

T: 8802 2389  
24 hours

Level 1, MGM MACAU



**PORTOFINO**  
Casino Level1, Shop 1039,  
The Venetian Macao

TEL: +853 8118 9950



**AFRIKANA**  
Monday to Sunday  
6:00pm - 3:00am

Location : AfriKana, Macau Fisherman's Wharf  
Telephone Number : (853) 8299 3678

#### JAPANESE

##### SHINJI BY KANESAKA

Level 1, Crown Towers  
Lunch 12:00 - 15:00  
Dinner 18:00 - 23:00

Closed on  
Tuesday (Lunch and Dinner)  
Wednesday (Lunch)

#### ASIAN PACIFIC

##### ASIA KITCHEN

Level 2, SOHO at City of Dreams  
Opening Hours  
11:00 - 23:00

### GOLDEN PAVILION

Level 1, Casino at City of Dreams

Opening Hours

24 Hours



#### GOLDEN PEACOCK

Casino Level1, Shop 1037,  
The Venetian Macao

TEL: +853 8118 9696

Monday - Sunday:

11:00 - 23:00

### PORTUGUESE

#### CLUBE MILITAR

975 Avenida da Praia Grande  
T: 2871 4000

12:30 - 15:00 / 19:00 - 23:00

#### FERNANDO'S

9 Praia de Hac Sa, Coloane  
T: 2888 2264

12:00 - 21:30

#### O SANTOS

20 Rua da Cunha, Taipa Village  
T: 2882 5594

Wednesday - Monday

12:00 - 15:00 / 18:30 - 22:00

### WESTERN

#### FOGO SAMBA

Shop 2412 (ST. Mark's Square)  
The Venetian Macao

TEL: +853 2882 8499

#### NAAM

Grand Lapa, Macau  
956-1110 Avenida da Amizade, The Resort

T: 8793 4818

12:00 - 14:30 / 18:30 - 22:30

(Close on Mondays)

#### BARS & PUBS



#### 38 LOUNGE

Altrira Macau,  
Avenida de Kwong Tung, 38/F Taipa

Sun-Thu: 13:00 - 02:00

Fri, Sat and Eve of public holiday:  
15:00 - 03:00

### R BAR

Level 1, Hard Rock Hotel

Opening Hours

Sun to Thu:

11:00 - 23:00

Fri & Sat:

11:00 - 24:00



#### BELLINI LOUNGE

Casino Level 1, Shop 1041,  
The Venetian Macao

CONTACT US:

Tel: +853 8118 9940

Daily: 16:00 - 04:00



## TASTE OF EDESIA

Irene Sam

### FOOD

### VARIATIONS OF RED

**I**t's finally winter in Macau. As the temperature drops and the chilly winds begin to get stronger, there's nothing better to do than to enjoy a glass of sumptuous red wine. Recently Chilean wine producer Concha Y Toro teamed up with Chef Bruno Ménard, Don Melchor Brand Ambassador and Asia's most iconic chef, to express both tradition and innovation and render the subtleties of a food pairing with the Chilean icon.

In 1986, Viña Concha Y Toro set out to produce Don Melchor, a "terrior" wine of world stature, faithfully expressing Cabernet Sauvignon from one of the world's best terroirs for the particular variety. Don Melchor is one wine, one varietal, one terrior, an exquisite Cabernet Sauvignon from the Puente Alto terroir in Chile. Over the decades, vintage influences and characteristics have developed the wine and this time around, Chef Ménard is taking up the challenge to create an innovative dinner, pairing five recipes with five vintages. From starter to dessert, the chef matches the nuances of the wine by working with the subtleties of each vintage.

"This challenge is all about wine and food. Food is about sensation, pleasure and trying to match this amazing wine with my type of food was not easy. The wine is brilliant and you can feel that the wine maker also expresses sensations as well as a specific terroir in the wine. You will see the color red throughout the dinner," Chef Ménard comments.

To start off, Chef Ménard presents a poached egg on a fire roasted Piñollo coulis, with a salad topped with thin slices of air dried beef tenderloin, as well as 48 month old Conté cheese, subtly finished with a Lapsang Souchong black Chinese tea Chantilly. Don Melchor 1990 is selected to go with the dish. The wine starts with a smoky oak and leather aroma, notes of liquorice and game flavors follow. Together with the dish, the seductive aroma and smokiness is a match made in heaven, leaving discerning diners wanting more. For the Don Melchor 2007, an intense vintage with tremendous complexity and notes of chocolate, cinnamon, nutmeg, and orange peel, Chef Ménard made a pan seared slice of duck foie gras, topped with a mix of ginger confit, almond candy, chopped chives, complimented with a bitter orange coulis and Vinea, Chef Ménard's original cocoa vinegar. "There are several elements that keep coming back in every dish, especially the orange aroma and



the color red. Would you consider these as the signature elements that help you pair the food with the wine?" I ask.

"In fact, yes. Orange is present. However, there is another little secret. I have created a mix of spices to mimic the aroma of the Don Melchor, and I put a little bit of the mélange into each dish. I won't tell you exactly which types of spices I put in it, but I can assure you that it is like magic. It makes the dishes synchronize with the wine," he answers.

It is perhaps the dessert that drives me wild at the end of the meal. It is indeed just as Chef Ménard explains, one can almost get the taste of the wine from a dish. The Don Melchor 2010 is chosen to go with the dessert, a fresh strawberries and strawberry compote, with red wine pruneau and spiced granité, espuma scented with orange and lemon zest, vanilla and cinnamon stick.

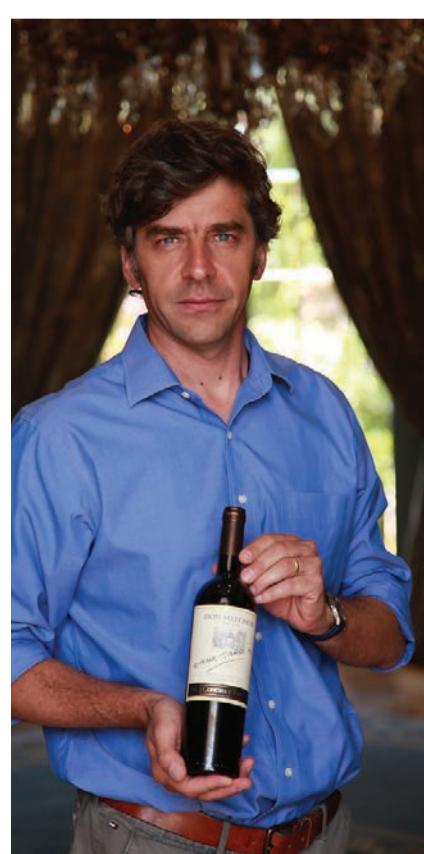
"The way you should eat this dessert is to use the spoon to dig all the way down, so that you can



get the texture of the granité and the creaminess on top and all the alcohol is gone from the red wine pruneau," he instructs.

"I love the spiciness and the chocolate notes of the wine. The red cherry, plum, and strawberry flavors are amazing. Finally, the

silky tannins make it an elegant and refined wine. Together with the dessert, it is a perfect way to end the meal," I conclude.



## WHAT'S ON



### TODAY (DEC 4)

An EXHIBITION CELEBRATING THE LIFE OF NELSON ROLIHLAHLA MANDELA

The strength of this exhibition is the way it attempts to provide a layered glimpse of Mandela in all his various guises and reincarnations. It examines his undoubted strengths and greatness, but does not shy away from his (self-acknowledged) weaknesses too.

The exhibition traces how Mandela built a new nation from the fragments of conflict, making full use of the “weapons” at his disposal: love, persuasion, forgiveness and acute political acumen – with a fair amount of self-deprecating humor sprinkled in for good measure.

TIME: 10am-7pm (Mondays to Fridays, closed on the public holidays)

3pm-8pm (Saturdays)

UNTIL: December 5, 2015

VENUE: Rui Cunha Foundation Gallery, Avenida da Praia Grande, nº 749, r/c

ADMISSION: Free

ENQUIRIES: (853) 2892 3288

ORGANIZERS: Rui Cunha Foundation Gallery  
<http://www.ruicunha.org>



### TOMORROW (DEC 5)

BEST FOOT FORWARD

In this celebration of the 16th anniversary of the establishment of the Macau SAR, prize-winning dancers from Denmark, Germany and China will perform for local residents in a potpourri of world-class ballroom and Latin dancing in the 2015 ‘Sarau musical e de Dancas Latinas e de Salao’. Local teenage sports and dance representatives and training teams will also demonstrate their achievements, with several local singers invited to join the show this year. Energy, romance and the charm of Macau youth all wrapped up in one unforgettable evening!

TIME: 8pm

VENUE: Tap Seac Multisport Pavilion

ADMISSION: MOP100

ENQUIRIES: (853) 2852 5885

ORGANIZER: Macau Sport Development Board, Macau Dance Sport Federation



### SUNDAY (DEC 6)

PARADE THROUGH MACAU, LATIN CITY

This year's Parade, themed as a treasure hunt in celebration of the 16th Anniversary of the Establishment of Macau SAR, divides the route into three secret areas, where young local illustrators Eric Fok Hoi Seng, Un Chi Wai and Lam Ieong Kun have designed decorations and creative characters. The treasure hunt revolves around more than 50 local and foreign performing groups comprising some 1,500 participants intent on ramping up the atmosphere with Cantonese Opera, mime, theater, magic, music, martial arts, folk and Oriental dances, giant balloons, masks, rattles, stilt walkers, Aztec dancing, a marching band, puppets – and a treasure chest full of fun!

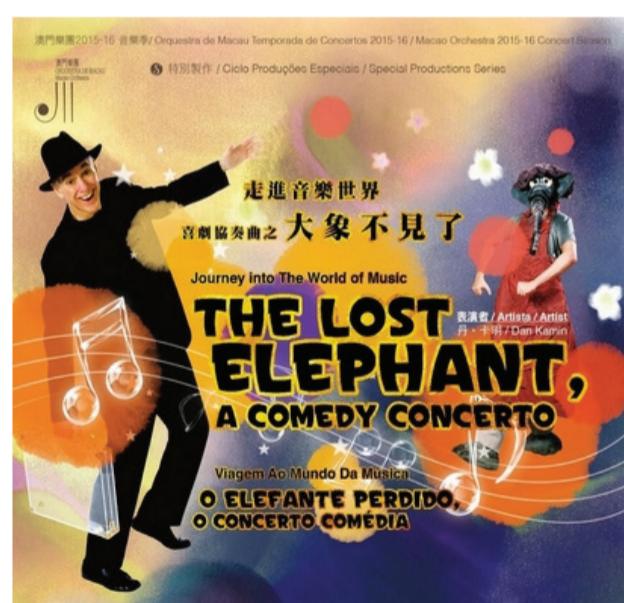
STARTING POINT: Ruins of St. Paul's (4pm)

END POINT: Tap Seac Square (5:30pm)

ENQUIRIES: (853) 2836 6866

ORGANIZER: Cultural Affairs Bureau

<http://www.icm.gov.mo/Macauparade>



JOURNEY INTO THE WORLD OF MUSIC - THE LOST ELEPHANT

American artist Dan Kamin is actively engaged with film and theater but his enthusiasm for classical music allows him to mount the stage in concert halls all over the world. In his first visit to Macau, he will present the ‘Comedy Concerto’ he composed by mingling mime, fairy tales and classical music, promising an entertaining and thrilling performance.

TIME: 3pm & 5:30pm

VENUE: Macau Tower Auditorium

ADMISSION: MOP150, MOP250, MOP350, MOP450

ENQUIRIES: (853) 2853 0782

ORGANIZER: Macau Orchestra  
<http://www.icm.gov.mo/om>



### MONDAY (DEC 7)

MACAU LIGHT FESTIVAL 2015 - JOURNEY OF LIGHTS

Revolving around the theme of the Butterfly Fairy and little elves, the Macau Light Festival 2015 - Journey of Lights will dazzle a total of 11 famous attractions in town including some world heritage ones. The Festival features three program highlights known as 3D Mapping, Light Installation and Interactive Games. People of any age group are welcome to join the event. Locals and visitors can follow the Butterfly Fairy to look for little elves and embark upon an enchanting journey of glittery lights.

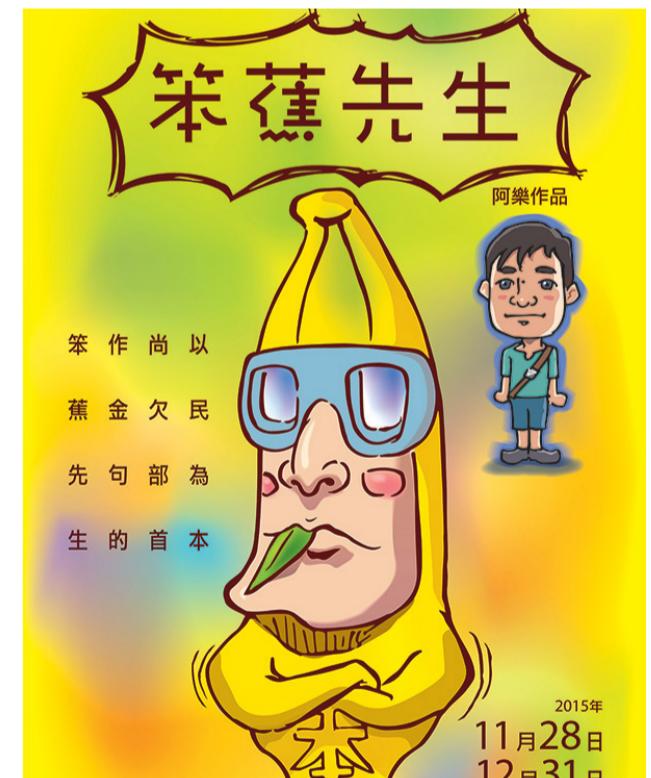
TIME: 7pm-10pm

VENUE: Senado Square; Lou Kau Mansion; Cathedral Lane, Cathedral Square; St. Dominic's Church; Ruins of St. Paul's; Holy House of Mercy & A-Ma Temple.

ADMISSION: Free

TOURISM HOTLINE: (853) 2833 3000

ORGANIZER: Macau Government Tourist Office  
<http://www.macautourism.gov.mo>



### TUESDAY (DEC 8)

‘MR. BANANA’ - LOK 4 FRAMES COMICS EXHIBITION

‘Mr. Banana’ - Lok 4 Frames Comics Exhibition pits ‘disharmony’ on the outside against ‘fluctuation inside’ in a bid to derive positive energy.

TIME: 10:30am-6:30pm (Closed on Mondays and public holidays)

UNTIL: December 31

VENUE: Calçada da Igreja de S. Lázaro 10, Macau

ADMISSION: Free

ENQUIRIES: (853) 2835 4582



## WEDNESDAY (DEC 9) MACAU PRINTMAKING TRIENNIAL 2015

As one of the four great inventions of ancient China, it is well known that printing has had a historical significance. The art of printmaking, which can trace its history to over a thousand years ago, is therefore of great importance and has become a prevailing artistic medium nowadays. To promote printmaking art, in succession to the first eminent Macau Printmaking Triennial, the Cultural Affairs Bureau will present its second edition in Autumn 2015. The Triennial seeks to provide an overview of the latest aspects and innovations of contemporary printmaking throughout the world. As a platform for printmaking experts from various countries, it also offers great opportunities to encourage exchange and advancements in the genre of printmaking.

TIME: 10am-7pm (No admission after 6:30 pm, closed on Mondays)  
UNTIL: February 14, 2016  
VENUE: Macau Museum of Art, Av. Xian Xing Hai, s/n, NAPE  
ADMISSION: MOP5 (Free on Sundays and public holidays)  
ENQUIRIES: (853) 2836 7588  
ORGANIZER: Cultural Affairs Bureau  
<http://www.triennialmacau.com>



## THURSDAY (DEC 10) INWARD GAZES: DOCUMENTARIES OF CHINESE PERFORMANCE ART 2015

With the human body as media, some creations will defamiliarize and differentiate daily activities, thus prompting viewers to rediscover topics about themselves and their surroundings. The two exhibitions: 'Inward Gazes: Documentaries of Chinese Performance Art' and 'Inward Gazes: Four Artists in Performance' is now on show at the Nam Van Old Court Building in Macau, showcasing 76 pieces by 53 artists from Macau, Hong Kong, China and Taiwan.

TIME: 10am-7pm (No admission after 6:30 pm, closed on Mondays)  
UNTIL: February 14, 2016  
VENUE: Macau Museum of Art, Av. Xian Xing Hai, s/n, NAPE  
ADMISSION: MOP5 (Free on Sundays and public holidays)  
ENQUIRIES: (853) 8791 9814  
ORGANIZER: Macau Museum of Art  
<http://www.mam.gov.mo>

# Sands®

## WEEKEND

**SHOP AND STAY**  
Shopping expenditure can now earn hotel stays starting from just MOP20,000. With over 650 luxury duty-free shops offering all your favourite brands, it's never been so easy. Shoppers spending within Shoppes at Four Seasons, Shoppes at Venetian and Shoppes at Cotai Central (except dining outlets) are entitled to the hotel offers below:

<b>Spend</b>	<b>Hotel Stay</b>
MOP60,000	1 night in a Deluxe Room at Four Seasons Hotel Macao, Cotai Strip®
MOP30,000	1 night in a Royale/Bella Suite at The Venetian Macao®
MOP20,000	1 night in a Deluxe Room at Sheraton Macao Hotel, Cotai Central

Shoppers with valid Shop & Stay Voucher must book the room and check-in on or before 1 June 2016.  
See [sandsresortsmacao.com](http://sandsresortsmacao.com) for details and terms and conditions.

**AIR SUPPLY**  
**7:45pm 12 December (Saturday)**  
**The Venetian Theatre**

Graham Russell and Russell Hitchcock first met in 1975 while working in Sydney on the rock opera Jesus Christ Superstar. Soon after, they formed Air Supply, one of the world's best loved musical groups. Having played from Cuba to China, they have scored numerous hits and won thousands of devoted followers. Macao fans can expect to be treated to a night of their worldwide hits, such as "Lost in Love" and "I'm All Out of Love" to celebrate their 40 years of music.

Tickets: From HKD/MOP380, call reservations +853 2882 8818  
[cotaiticketing.com](http://cotaiticketing.com)

**I AM HARDWELL UNITED WE ARE**  
**11pm 19 December (Saturday)**  
**Cotai Arena**

Robbert van de Corput, better known as Hardwell, has twice been crowned the best DJ in the world. The 27-year-old Dutch DJ has sold out arenas across the globe as well as at every major electronic music festival. Accompanied by dramatic visuals, lasers and a breathtaking light show, the high-octane set will see Hardwell beatmatch and crossfade as he masterfully manipulates the crowd into a crescendo that will leave everyone united in perspiration and admiration.

Tickets: From MOP/HKD640, call reservations +853 2882 8818  
[cotaiticketing.com](http://cotaiticketing.com)  
Note: Admissions will be granted only to persons aged 18 and above.

**WARM IN WINTER HOTPOT BUFFET**  
**Level 1, Xin, Sheraton Macao Hotel, Cotai Central**

Indulge in Xin's hotpot soup bases specially created with Chinese herbs this winter. They will satisfy your tastebuds, restore and revive your natural balance.

Lunch: MOP238+ per adult | Dinner: MOP398+ per adult  
SPG members enjoy 15% off

Reservations: +853 8113 1200  
\* All prices are subject to 10% service charge.

澳門金沙度假區

# Sands®

## RESORTS

### COTAI STRIP MACAO

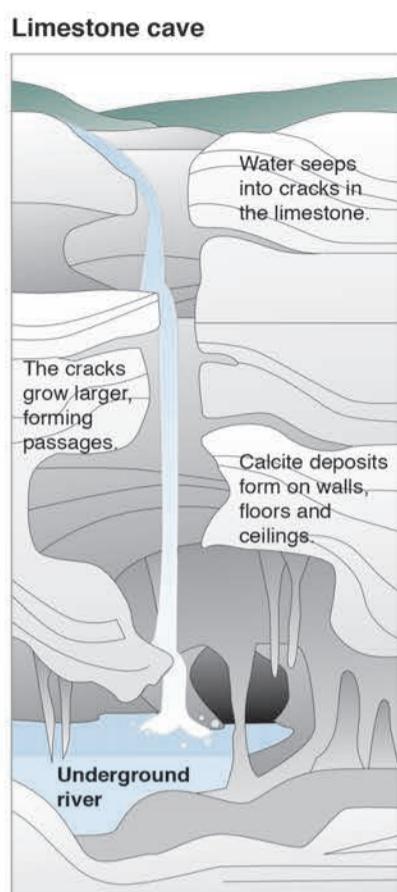
Sheraton  
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FOUR SEASONS HOTEL  
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## Types of caves

**Solution caves** are the most common type of cave and can be formed from many kinds of rock: dolomite, marble, gypsum and limestone. Thousands of years of rainwater trickling into the rock creates cracks that turn to tunnels that over time grow larger and larger — some develop into huge caverns with amazing rock and crystal formations.

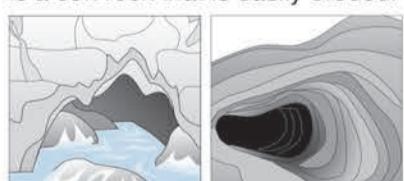
**Limestone caves** are a type of solution cave; they are millions of years old. Limestone is a rock made from the skeletons and shells of ancient sea creatures.

**Sea caves** are formed by thousands of years of powerful waves eroding the rock. Some sea caves are entirely underwater and accessible only to deep-sea divers.

**Lava tubes** are a kind of cave shaped like a tunnel or worm hole. They are created by molten rock (lava) from volcanic activity. The entrance to a lava tube is usually through a collapsed roof.

**Ice caves** form inside glaciers and icebergs, but the term can be used to describe any cave with ice formations.

**Sandstone caves** were home to many ancient people. Sandstone is a soft rock that is easily eroded.



SOURCES: World Book Encyclopedia, World Book Inc.; <http://www.cavern.com>; <http://www.nps.gov>

# WORLD OF WONDER

Exploring the realms of history, science, nature and technology

# CAVES

By Laurie Triefeldt

Caves can be found all over the world. Some caves are open to the public, while others are wild and untouched. Sometimes called caverns, caves are natural hollows in the Earth, usually created by water or wind.

**This old cave**

Caves take many thousands of years to form; some are 50 million years old. As long as a cave has water, it is considered living and ever-changing. A cave without water does not change and is considered dead. Some caves have areas with and without water.

Scientists who study caves are called **speleologists**. Amateur cave explorers are called **spelunkers**; these adventurers enjoy testing their strength, skill and nerve while exploring caves.

**Speleothems**

Limestone caves have rock formations called **speleothems** on the walls, floor and ceiling. **Stalactites** hang like icicles from the ceiling, and **stalagmites** grow up from the ground. These formations are created by the mineral **calcite**, which has been deposited by seeping or dripping water over many centuries. Speleothems often have other minerals in them that make them different colors.

**Life in a cave**

Prehistoric humans sometimes lived in caves. Archaeologists have found many ancient artifacts and paintings in caves.

Most plants need sunlight to grow, but some plants, bacteria and fungi use the energy from decaying matter instead of light. These can be found in the darkest of caves.

A variety of animals make caves their homes, some seasonally, others permanently. Bears, wildcats, raccoons and other small animals will nest and shelter in caves, but still spend much of their time outside. Animals who use caves on a temporary basis are called **troglobiontes** and are usually found near the entrances of caves.

Many species of bats live in caves. During the day huge colonies hang from the ceilings of dark caverns. Cave floors are often slippery with **guano** (bat droppings). As dusk approaches, they leave the cave in search of food. Bats are considered troglobiontes because they leave the cave to feed.

Animals that live in the darkest parts of a cave are called **troglodytes**. Some salamanders, fish, insects and spiders are troglodytes. Many of these animals are blind and have no pigmentation to their skin, appearing transparent.

Sometimes stalactites and stalagmites meet in the middle, forming a **column**.

A variety of bacteria, mold and fungi grow in caves.

Tiny shrimps, copepods, isopods and amphipods live in or near cave waters.

Isopod

Copepod

Column

Drip curtain formation

Stalagmite formation

Stalactite formation

Helictite formation

Underground river

Guano

Bear

Raccoon

Centipede

Tennessee cave salamander

Deep cave spider

Cave cricket

Isopod

Copepod

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