

L'ÎLE  
DU  
SAVOIR



[EUREKAFESTIVAL.CA](http://EUREKAFESTIVAL.CA)

THE BIG SCIENCE  
CELEBRATION  
AT THE OLD PORT

**JUNE  
8.9.10**

**EUREKA!**

IN COLLABORATION WITH

**RioTinto**

 **Desjardins**

**NINTENDO  
LABO**

  
Télé-Québec

 **NSERC  
CRNSG**

Montréal 

Québec 

# WELCOME TO THE EUREKA! FESTIVAL

## ROBOTS TAKE OVER THE OLD PORT

For its 12th edition, the festival is thinking big and looking to the future with robotics and artificial intelligence as this year's theme.

From space exploration to humanoids and autonomous homes, robotics is popping up everywhere and its future looks promising. Its emergence in scientific fields and in our daily lives both fascinates us and makes us question.

Come discover, experiment, create and reflect with us on the potential and the future of robots and artificial intelligence. Expand the boundaries of knowledge as you stroll among more than 100 free activities. But watch your step! You might bump into a robot.

**FRIDAY  
JUNE 8**  
9:30 AM – 3:30 PM

**SATURDAY  
JUNE 9**  
10:30 AM – 7:30 PM  
Evening program  
starts at 8 PM

**SUNDAY  
JUNE 10**  
10:30 AM – 6 PM

#FESTIVALEUREKA

EUREKAFESTIVAL.CA




# FES TI VAL SITE MAP



## NOT TO BE MISSED

- A** Sara's robotic lemonade service ▶ RoboCup International / Molecular Ice Cream, Attraction chimique ▶ Université Laval
- B** The Adventures of Loulou and Autis, the Autistic Hedgehog ▶ Cogni'junior
- C** High-tension Adventure ▶ Voiles en voiles
- D** Discover the Secrets of DNA ▶ IRIC (Friday) / Paint Me a Robot ▶ Catherine Petit, illustrator and muralist
- E** Musical Riders ▶ Musical Bikes from Atracktiv
- F** Troubadour Stage
- G** RoboCup Space
- H** Techno Soccer ▶ Kelitos Sports

- I** Wuxia the Fox, augmented reading ▶ Studio Allo
- J** Smoking Cocktails, Attraction chimique ▶ Université Laval
- K** Make, play and discover with 

## WORKSHOPS

- 21** Robotique FIRST Québec
- 22** École de technologie supérieure (ETS)
- 24 25** Workshops
- 26** Mouvement montréalais Les Filles & le code (MMFC) workshops

## STAGES

- 23** Ivado Stage
- 48** Main Stage

## TECHNO ZONE

- 1** Réseau Technoscience
- 2** Chaire pour les femmes en sciences et en génie
- 3** 44 SCREENS
- 4** Communautique
- 5** Prompt
- 6** Montreal Digital Spring
- 7** Let's Talk Science
- 8** Institut national de la recherche scientifique
- 9** NAD-UQAC
- 10** Minority Media
- 11** Association francophone pour le savoir ▶ ACFAS

## AIR AND SPACE ZONE

- 27** Aéro Montréal ▶ Quebec's Aerospace Cluster
- 28** ULM Quebec
- 29** Centre for Research in Astrophysics of Quebec

## HUMAN ZONE

Fonds de recherche du Québec

- 12** Armand-Frappier Museum
- 13** Brainreach
- 14** NeuroServo Inc.
- 15** Demo Center
- 16** Faculty of Arts and Science ▶ Université de Montréal
- 17** Polytechnique Montréal ▶ PolyCortex
- 18** Le Miel de Bonneau
- 19 20** Héma-Québec in collaboration with l'Association des bénévoles du don de sang (ABDS)

- 30** MDA Corporation
- 31** Canadian Space Agency
- 32** The Xenos Initiative
- 33** Cosmodome

## NATURE ZONE

 Desjardins

- 34** GUEPE (Le Groupe uni des éducateurs-naturalistes et professionnels en environnement)
- 35** Québec Mining Association
- 36** Nature Expert
- 37** Environment and Climate Change Canada
- 38** Ministry of Energy and Natural Resources (mining sector)
- 39** Mission Monarch (Space for Life)
- 40** Parc de la Rivière-des-Mille-Îles
- 41** Group for Interuniversity Research in Limnology and Aquatic Environment
- 42** Musée de paléontologie et de l'évolution
- 43** Les Clubs 4-H du Québec
- 44 45 46 47** Parks Canada

## INGENUITY ZONE

 RioTinto

- 49** Université de Sherbrooke (Engineering)
- 50** Polytechnique Montréal ▶ Archimède
- 51** Polytechnique Montréal ▶ OSA-SPIE Student chapter
- 52** Polytechnique Montréal ▶ Chemical Engineering department
- 53** Folie Technique, Polytechnique Montréal
- 54** Camp de jour Bois-de-Boulogne
- 55** Université du Québec à Montréal (UQAM)
- 56** Fédération des Inventeurs du Québec
- 57** Museum of Ingenuity J. Armand Bombardier and Sherbrooke Nature & Science Museum
- 58** acceSciences, une initiative des cégeps de Montréal
- 59** Les Scientifines
- 60** Alloprof
- 61** Montréal Science Centre

# SCHEDULE

THE  
FESTIVAL  
AT A  
GLANCE

WORKSHOPS

SHOWS AND PRESENTATIONS

NOT TO BE MISSED

## FRIDAY

### 9:30 AM

- 48 Humanoids in Education p. 22
- 23 Accurate Reporting or Fake News? p. 18
- 25 Predators and Prey p. 27

### 9:30 AM - 11:30 AM

- 24 Vibot the Robot p. 26

### 9:30 AM - 12 PM

- 26 Your First Wearable p. 27

### 9:30 AM - 3:30 PM

- 21 Robotics FIRST: Robots for Real p. 26
- 22 Popsicle Bridge Challenge p. 26
- A Sara's Robotic Lemonade Service p. 12
- C High-tension Adventure p. 12
- E Musical Riders p. 12
- H Techno Soccer p. 13
- I *Wuxia the Fox* - Augmented Reading p. 13

### 10:15 AM

- 23 Major Discovery in the Saint-Léonard Cavern p. 18

### 10:30 AM

- 25 Predators and Prey p. 27

### 10:45 AM

- 48 The Magic of Chemistry p. 22

### 11:30 AM

- 23 Zero Net Homes p. 18

### 11:45 AM

- 25 Take Control of Canadarm2 p. 27

### 12 PM

- 48 Grant Presentation - Fonds de recherche du Québec p. 22

### 12:15 PM

- 24 Palaeontologist Grab Your Tools! p. 27
- 23 Forensic Science Solves the Case p. 19

### 12:30 PM

- 26 Makers of Happy Plants p. 27

### 12:45 PM

- 48 The Science of Motion, Circus Style p. 23
- 25 Take Control of Canadarm2 p. 27

### 1:15 PM

- 23 Voices Painting Pictures p. 19
- 24 Palaeontologist Grab Your Tools! p. 27

### 1:30 PM

- 26 Makers of Happy Plants p. 27

### 1:45 PM

- 48 The Shō p. 23

### 2 PM

- 25 Film Shoot p. 27

### 2:30 PM

- 25 Film Shoot p. 27
- 26 Makers of Happy Plants p. 27
- 24 Do You Have a Sixth Sense p. 27

### 3 PM

- 25 Film Shoot p. 27

## SATURDAY

### 10:30 AM

- 25 Illuminated Robot p. 27
- 26 Coding Robots p. 28

### 10:30 AM - 7:30 PM

- 21 Robotics FIRST: Robots for Real p. 26
- 22 Popsicle Bridge Challenge p. 26
- G RoboCup Space p. 13
- C High-tension Adventure p. 12
- E Musical Riders p. 12

### 10:45 AM

- 24 Mathemagic p. 28

### 11 AM

- 23 Robots in our Lives p. 19
- 48 Did you say "Robots"? p. 23

### 11:15 AM

- 25 Illuminated Robot p. 27

### 11:30 AM

- 24 Mathemagic p. 28
- 26 Coding Robots p. 28

### 11:45 AM

- 23 Robots in our Lives p. 19

### 12 PM

- 25 Illuminated Robot p. 27

### 12 PM - 5 PM

- I *Wuxia the Fox* - Augmented Reading p. 13
- D Paint Me a Robot p. 12
- B The Adventures of Loulou and Autis, the Autistic Hedgehog p. 12

### 12 PM - 6 PM

- A Molecular Ice Cream p. 12
- J Smoking Cocktails p. 13
- H Techno Soccer p. 13

### 12:15 PM

- 24 Mathemagic p. 28
- 48 The Sea - Eyes of Science p. 23

### 12:30 PM

- 23 Spotlight on David Saint-Jacques p. 19
- 26 Coding Robots p. 28

### 1 PM - 5 PM

- F Troubadour Stage p. 13

### 1:15 PM

- 25 Green Bombardment p. 28

### 1:30 PM

- 23 Mind-Boggling Biodiversity p. 19
- 48 Science or Magic 3 - The Incredible Experiment p. 23

### 1:45 PM

- 26 Technomagic p. 28
- 24 Making Magic p. 28

### 2 PM

- 25 Green Bombardment p. 28

### 2:20 PM

- 23 Inspired by Einstein p. 19

### 2:30 PM

- 26 Technomagic p. 28

### 2:45 PM

- 48 Beatboxing p. 24
- 25 Green Bombardment p. 28
- 24 Making Magic p. 28

### 3:15 PM

- 26 Technomagic p. 28

### 3:30 PM

- 23 Elles-Innov p. 19

CONTINUES ON NEXT PAGE →

### 3:45 PM

- 24 Making Magic p. 28
- 48 The Magic of Chemistry p. 22

### 4 PM

- 25 Home Automation p. 28

### 4:15 PM

- 26 Bug-Bot p. 28

### 4:40 PM

- 23 Great Discoveries p. 20

### 5 PM

- 48 My Life as a Robot p. 24

### 5 PM - 7:30 PM

- 24 Board Games p. 29

### 5:15 PM

- 26 Bug-Bot p. 28
- 25 Home Automation p. 28

### 5:45 PM

- 23 Mathematical Vacation p. 20

### 6:15 PM

- 26 Bug-Bot p. 28

### 6:30 PM

- 25 Home Automation p. 28

### 6:45 PM

- 23 The Mechanics of Sport p. 20

### 8 PM

- 48 An Evening with *Génial!* from Télé-Québec p. 13

# SUNDAY

### 10:30 AM

- 26 Programmers Wanted p. 29

### 10:30 AM - 12 H 30

- 25 Robotic Insects p. 29

### 10:30 AM - 6 PM

- 21 Robotics FIRST: Robots for Real p. 26
- 22 Popsicle Bridge Challenge p. 26
- G RoboCup Space p. 13
- C High-tension Adventure p. 12
- E Musical Riders p. 12

### 10:45 PM

- 24 Picasso without Paint p. 29

### 11 AM

- 23 Robots Helping Animals p. 20
- 48 Legends Take Flight p. 24

### 11:30 AM

- 24 Picasso without Paint p. 29
- 26 Programmers Wanted p. 29

### 12 PM - 5 PM

- I *Wuxia the Fox* - Augmented Reading p. 13
- D Paint Me a Robot p. 12
- B The Adventures of Loulou and Autis, the Autistic Hedgehog p. 12

### 12 PM - 6 PM

- A Molecular Ice Cream p. 12
- J Smoking Cocktails p. 13
- H Techno Soccer p. 13

### 12:15 PM

- 24 Picasso without Paint p. 29
- 23 Voice Painting Pictures p. 19

### 12:45 PM

- 48 Extreme Expeditions in the Name of Science p. 24
- 25 Cyborg Arm p. 30

### 1 PM

- 26 Micro:Bit Light Patterns p. 30

### 1 PM - 5 PM

- F Troubadour Stage p. 13

### 1:15 PM

- 24 Making Connections p. 30
- 23 Artificial Neural Networks and Society p. 20

### 1:45 PM

- 25 Cyborg Arm p. 30

### 2 PM

- 24 Making Connections p. 30
- 26 Micro:Bit Light Patterns p. 30
- 48 Insects on Stage p. 24

### 2:30 PM

- 23 OSIRIS-REx Mission: En Route to Bennu p. 20

### 2:45 PM

- 24 Making Connections p. 30
- 25 Cyborg Arm p. 30

### 3:30 PM

- 26 Technomagic p. 28
- 48 The Magic of Chemistry p. 22

### 3:45 PM

- 23 Mathematical Vacation p. 20
- 24 Science Illustrated p. 30

### 4 PM - 6 PM

- 25 Reinventing the Wheel p. 30

### 4:15 PM

- 26 Technomagic p. 28

### 4:35 PM

- 23 Become a Northern Lights Hunter p. 20

### 4:45 PM

- 48 Fire and Ice p. 24
- 24 Science Illustrated p. 30

### 5 PM

- 26 Technomagic p. 28



PHOTO MELANIE DUSSEAUT

# NOT TO BE MISSED

SCIENCE FROM EVERY ANGLE

## A SARA'S ROBOTIC LEMONADE SERVICE

### ROBOCUP INTERNATIONAL

Want some fresh lemonade served by a robotic waitress? Just ask for Sara the robot.

FRIDAY: 9:30 AM – 3:30 PM

## MOLECULAR ICE CREAM

### ATTRACTION CHIMIQUE UNIVERSITÉ LAVAL

Liquid nitrogen is so cool that you can use it to make instant ice cream. Our milk-bar chemists will show you how, and give you a taste.

SATURDAY AND SUNDAY: NOON – 6 PM

## B THE ADVENTURES OF LOULOU AND AUTIS, THE AUTISTIC HEDGEHOG

### COGNI'JUNIOR

Follow the adventures of Loulou the wolf cub and Autis the hedgehog, and learn about autism and inclusive schooling.

SATURDAY AND SUNDAY: NOON – 5 PM

## C HIGH-TENSION ADVENTURE

### VOILES EN VOILES

Take a ride on our mini zipline. Explore the science behind cable tension at an aerial adventure park.

FRIDAY: 9:30 AM – 3:30 PM

SATURDAY: 10:30 AM – 7:30 PM

SUNDAY: 10:30 AM – 6 PM

CONTINUOUS

## D PAINT ME A ROBOT

### CATHERINE PETIT, ILLUSTRATOR AND MURALIST

Imagine a future populated by robots. While Catherine Petit draws robots on the ground, you can add a touch of colour. Bring your talent to a collective fresco.

SATURDAY AND SUNDAY: NOON – 5 PM

## E MUSICAL RIDERS

### MUSICAL BIKES FROM ATRACTTIV

Hop on and become a musician! Depending on which bike you choose, you'll be a guitarist, a drummer, a bass player, or a singer.

FRIDAY: 9:30 AM – 3:30 PM

SATURDAY: 10:30 AM – 7:30 PM

SUNDAY: 10:30 AM – 6 PM

CONTINUOUS

## VOILES EN VOILES

## F TROUBADOUR STAGE

This tiny stage showcases a variety of talented artists. And between shows, it's your turn to shine!

SATURDAY AND SUNDAY: 1 PM – 5 PM

## G ROBOCUP SPACE

### ROBOCUP INTERNATIONAL

Nice shot ... first touch ... and it's a goal! Attend a soccer match between humanoid robots, and try your hand at programming and construction in the RoboCup Creativity Zone.

SATURDAY: 10:30 AM – 7:30 PM

SUNDAY: 10:30 AM – 6 PM

CONTINUOUS

## H TECHNO SOCCER

### KELITOS SPORTS

Soccer meets technology. Kick a smart soccer ball and instantly discover the speed, rotation, power, and trajectory of your shot.

FRIDAY: 9:30 AM – 3:30 PM

SATURDAY AND SUNDAY: NOON – 6 PM

## I WUXIA THE FOX

### AUGMENTED READING

### STUDIO ALLO

*Wuxia the Fox* is more than just a fabulous story. It's an interactive film activated by voice recognition.

FRIDAY: 9:30 AM – 3:30 PM

SATURDAY AND SUNDAY: NOON – 5 PM

EVERY 90 MINUTES – IN FRENCH

## J SMOKING COCKTAILS

### ATTRACTION CHIMIQUE

### UNIVERSITÉ LAVAL

Want to taste a deliciously chemical magic potion? Our guides will concoct some really smoking sparkling apple juice.

SATURDAY AND SUNDAY: NOON – 6 PM

# NIGHT PROGRAMMING

SCIENCE UNDER THE STARS



PHOTOS TÉLÉ-QUÉBEC

## 37 AN EVENING WITH GÉNIAL! FROM TÉLÉ-QUÉBEC

The popular TV science quiz *Génial!* takes the stage for a wild evening, hosted by Stéphane Bellavance and Martin Carli. Mind-blowing experiments, astonishing demonstrations, and guaranteed laughter for the entire family.

SATURDAY: 8 PM

LENGTH: 60 MINUTES – IN FRENCH

Free tickets available in limited quantity at the Festival information booth, Friday, June 8 and Saturday, June 9. Limit of four (4) tickets per person.

## IDEAS ON THE MOVE LABOKRACBOOM

A giant poet with a piercing gaze is roaming through the Eurêka! site. His words colour the world as he passes. Ideas shift, viewpoints overlap and meanings collide.



SATURDAY: 1:30 PM, 4 PM AND 9:15 PM

SUNDAY: 1 PM, 2:30 PM AND 4 PM

# CONTINUOUS ACTIVITIES

SCIENCE  
UNDER THE  
BIG  
TOP

## TECHNO ZONE

- 1 **RÉSEAU TECHNOSCIENCE**  
DÉBROUILLARDS CHALLENGE
- 2 **CHAIRE POUR LES FEMMES EN SCIENCES ET EN GÉNIE**  
XYLOPHONE BIRD
- 3 **44 SCREENS**   
AUGMENTED REALITY  
SPERM WHALE
- 4 **COMMUNAUTIQUE**  
ROBOTS IN THE SUN
- 5 **PROMPT**  
PLAYING WITH MISSION CODE
- 6 **MONTREAL DIGITAL SPRING**  
SAY HELLO TO HUMANOIDS
- 7 **LET'S TALK SCIENCE**  
CODING, STEM AND  
YOUR FUTURE
- 8 **INSTITUT NATIONAL DE LA RECHERCHE SCIENTIFIQUE**  
ROBOTS CONTROLLED  
BY YOUR MIND
- 9 **NAD-UQAC**  
3D UNIVERSE
- 10 **MINORITY MEDIA**   
TIME MACHINE VR: DIVE WITH  
THE DINOSAURS
- 11 **ASSOCIATION FRANCOPHONE POUR LE SAVOIR > ACFAS**  
SCIENCE IN ALL ITS FORMS



# CONTINUOUS ACTIVITIES

## HUMAN ZONE

Fonds de recherche  
du Québec

- 12 **ARMAND-FRAPPIER MUSEUM**  
ALLERGIES ARE NOTHING TO  
SNEEZE AT
- 13 **BRAINREACH**  
SECRETS OF THE BRAIN
- 14 **NEUROSERVO INC.**   
HOW FOCUSED ARE YOU?
- 15 **DEMO CENTER**   
BEYOND THE SENSES
- 16 **FACULTY OF ARTS AND SCIENCE > UNIVERSITÉ DE MONTRÉAL**  
SCIENTISTS OF TOMORROW
- 17 **POLYTECHNIQUE MONTRÉAL POLYCORTX**  
DUELING MINDS
- 18 **LE MIEL DE BONNEAU**  
BEEKEEPING COMES TO TOWN
- 19 20  
**HÉMA-QUÉBEC IN COLLABORATION WITH L'ASSOCIATION DES BÉNÉVOLES DU DON DE SANG (ABDS)**  
BLOOD TYPES

## AIR AND SPACE ZONE

- 27 **AÉRO MONTRÉAL > QUEBEC'S AEROSPACE CLUSTER**  
AEROSPACE ADVENTURE
- 28 **ULM QUEBEC**   
FLY WITHOUT A COCKPIT
- 29 **CENTRE FOR RESEARCH IN ASTROPHYSICS OF QUEBEC**  
EYES ON THE SKY!
- 30 **MDA CORPORATION**   
SPACE ROBOTICS
- 31 **CANADIAN SPACE AGENCY**  
CANADA IN SPACE
- 32 **THE XENOS INITIATIVE**  
SPACE DESIGN LAB
- 33 **COSMODOME**  
ROBOTS BETWEEN HEAVEN AND EARTH



**THIS YEAR, EUREKA! IS CELEBRATING SCIENCE ENTREPRENEURS WHO INSPIRE OUR YOUTH.**

**Follow the pictogram to discover the vitality of Québec entrepreneurship.**

# CONTINUOUS ACTIVITIES

SCIENCE  
UNDER THE  
BIG  
TOP

## NATURE ZONE



**34** **GUEPE** (GROUPE UNI DES ÉDUCATEURS-NATURALISTES ET PROFESSIONNELS EN ENVIRONNEMENT)  
ADAPTATIONS ALL AROUND

**35** **QUÉBEC MINING ASSOCIATION**  
THE MINING INDUSTRY IN OUR LIVES

**36** **NATURE EXPERT**   
OUR BRILLIANT BIRDS

**37** **ENVIRONMENT AND CLIMATE CHANGE CANADA**  
POLLUTANTS UNDER THE MAGNIFIER

**38** **MINISTRY OF ENERGY AND NATURAL RESOURCES** (MINING SECTOR)  
QUEBEC'S MINES

**39** **MISSION MONARCH** (SPACE FOR LIFE)  
SAVE THE MONARCHS

**40** **PARC DE LA RIVIÈRE-DES-MILLE-ÎLES**  
MYSTERIES OF MIGRATION

**41** **GROUP FOR INTERUNIVERSITY RESEARCH IN LIMNOLOGY AND AQUATIC ENVIRONMENT**  
WATER TEEMING WITH LIFE

**42** **MUSÉE DE PALÉONTOLOGIE ET DE L'ÉVOLUTION**  
FOSSILS, FOSSILS EVERYWHERE

**43** **LES CLUBS 4-H DU QUÉBEC**  
INSECT INSPIRATION

**44** **45** **46** **47**

**PARKS CANADA**  
CONSERVE, RESTORE AND CONNECT WITH NATURE

# CONTINUOUS ACTIVITIES

## INGENUITY ZONE

RioTinto

**49** **UNIVERSITÉ DE SHERBROOKE** (ENGINEERING)  
LOGICAL ROBOTS AND DIZZYING CHALLENGES

**50** **POLYTECHNIQUE MONTRÉAL ARCHIMÈDE**  
20,000 LEAGUES UNDER THE SEA

**51** **POLYTECHNIQUE MONTRÉAL OSA-SPIE STUDENT CHAPTER**  
OPTICS AT THE GROCERY STORE

**52** **POLYTECHNIQUE MONTRÉAL CHEMICAL ENGINEERING DEPARTMENT**  
THE GENIUS OF CHEMISTRY

**53** **FOLIE TECHNIQUE POLYTECHNIQUE MONTRÉAL**  
BIG CHALLENGES WITH LITTLE ROBOTS

**54** **CAMPS DE JOUR BOIS-DE-BOULOGNE**  
LEGO ROBOT RACE

**55** **UNIVERSITÉ DU QUÉBEC À MONTRÉAL (UQAM)**  
CONNECTIONS: FROM VEINS TO WIRES

**56** **FÉDÉRATION DES INVENTEURS DU QUÉBEC**  
CREATE YOUR DREAM ROBOT

**57** **MUSEUM OF INGENUITY J. ARMAND BOMBARDIER AND SHERBROOKE NATURE & SCIENCE MUSEUM**  
BIOMIMICRY: ROBOTS INSPIRED BY NATURE

**58** **ACCESCIENCES, UNE INITIATIVE DES CÉGEPS DE MONTRÉAL**  
BEWARE OF THE SCIENCE BUG!

**59** **LES SCIENTIFINES**  
ACTION-REACTION: THE AIR CAR

**60** **ALLOPROF**  
ALLOPROF LOVES SCIENCE

**61** **CENTRE DES SCIENCES DE MONTRÉAL**  
INGENUITY WINS



PHOTO: ROLAND LORENTE

# INTERACTIVE SHOWS AND LECTURES

SCIENCE TAKES THE STAGE

## IVADO STAGE

■ 23

### ACCURATE REPORTING OR FAKE NEWS?

**ÈVE BEAUDIN, JOURNALIST, AGENCE SCIENCE-PRESSE**  
 Become an assistant to the Rumour Detector. Discover its techniques for separating fact from fiction when it comes to robots.

**FRIDAY: 9:30 AM**  
**LENGTH: 30 MINUTES - IN FRENCH**

### MAJOR DISCOVERY IN THE SAINT-LÉONARD CAVERN

**LUC LE BLANC, QUEBEC SPELEOLOGICAL SOCIETY**  
 In 2017, spectacular galleries extending more than 200 metres were discovered in the Saint-Léonard Cavern. We'll tell you more about this unusual speleological find in an urban setting.

**FRIDAY: 10:15 AM**  
**LENGTH: 40 MINUTES - IN FRENCH**

### ZERO NET HOMES

**LOUISE HÉNAULT-ETHIER, DAVID SUZUKI FOUNDATION**  
 Houses can now produce 100% of their energy, and more to spare! Find out about these smart buildings. Who knows? Some day, you may even live in one.

**FRIDAY: 11:30 AM**  
**LENGTH: 30 MINUTES - IN FRENCH**

### FORENSIC SCIENCE SOLVES THE CASE

**BRIGITTE DESHARNAIS, CHEMIST, LABORATOIRE DE SCIENCES JUDICIAIRES ET DE MÉDECINE LÉGALE**  
 Anne Turgeon is found dead following a house fire. Was it an accident or murder? Conduct the investigation by assessing the results of various analyses with forensic scientists.

**FRIDAY: 12:15 PM**  
**LENGTH: 45 MINUTES - IN FRENCH**

### VOICES PAINTING PICTURES

**JONATHAN BELISLE, STUDIO ALLO**  
 Calling all bards! Tell a story and see images activated by voice recognition. A surprising symbiosis of reading and technology.

**FRIDAY: 1:15 PM**  
**SUNDAY: 12:15 PM**  
**LENGTH: 45 MINUTES - IN FRENCH**

### ROBOTS IN OUR LIVES

**SOODEH FAROKHI, CHIEF TECHNOLOGY OFFICER AND FOUNDER OF C2RO**  
 Could a robot become your friend? With C2RO software, robots now can recognize familiar faces and even hold a personalized conversation. Come and discover their full potential!

**SATURDAY: 11 AM**  
**SATURDAY: 11:45 AM - BILINGUAL**  
**LENGTH: 30 MINUTES**

### SPOTLIGHT ON DAVID SAINT-JACQUES

**ISABELLE TREMBLAY, DIRECTOR, ASTRONAUTS, LIFE SCIENCE AND SPACE MEDICINE BUREAU AT THE CANADIAN SPACE AGENCY**  
 Later this year, Canadian astronaut David Saint-Jacques will fly to the International Space Station. How has he trained and what will he do aboard the Station?

**SATURDAY: 12:30 PM**  
**LENGTH: 40 MINUTES - IN FRENCH**



DAVID SAINT-JACQUES

PHOTO: CANADIAN SPACE AGENCY

### MIND-BOGLING BIODIVERSITY VIA NATURE

Animals, amphibians, reptiles and birds are your neighbours in the city. Test and expand your knowledge of the ecological wealth of urban biodiversity.

**SATURDAY: 1:30 PM**  
**LENGTH: 30 MINUTES - IN FRENCH**

### INSPIRED BY EINSTEIN PRESENTED BY THE ALBERT EXPERIMENT



What do Planet Nine discovery, ocean crossing, and a prosthetic arm have in common? Let Konstantin Batygin, Chris Bertish, and Marin Schultz tell you all about robotics in an exclusive interview with Jean-Daniel Doucet from the Science Centre.

**SATURDAY: 2:20 PM**  
**LENGTH: 40 MINUTES - BILINGUAL**

### ELLES-INNOV

These women are young and ingenious. And their inventions will amaze you. Their mission: to convince the jury that they are the innovators of tomorrow ... in just four minutes!

**SATURDAY: 3:30 PM**  
**LENGTH: 45 MINUTES - IN FRENCH**

## **GREAT DISCOVERIES**

### **LES NEURONES ATOMIQUES**

Great inventions have changed the world. Learn about them through spectacular demonstrations inspired by some fascinating heroes of science.

**SATURDAY: 4:40 PM**

**LENGTH: 40 MINUTES - IN FRENCH**

## **MATHEMATICAL VACATION**

### **CŒUR DES SCIENCES, UNIVERSITÉ DU QUÉBEC À MONTRÉAL**

A geographical map that ignores distances, an infinity of hotel rooms, and a telepathic card game: get on board for an unusual holiday with two mathematicians.

Directed by Élisabeth Senay, Master's student in Theatre, UQAM

**SATURDAY: 5:45 PM**

**SUNDAY: 3:45 PM**

**LENGTH: 30 MINUTES - IN FRENCH**

## **THE MECHANICS OF SPORTS**

### **DEMO CENTER**

Explore the mechanics of sports through surprising stories and remarkable experiences. Your motor skills might amaze you. They may be better than those of robots!

**SATURDAY: 6:45 PM**

**LENGTH: 45 MINUTES - IN FRENCH**

## **ROBOTS HELPING ANIMALS**

### **PARC SAFARI**

Did you know that robots are our allies in species conservation? By blending into the habitats of animals, robots can spy on them and help us understand them.

**SUNDAY: 11 AM**

**LENGTH: 40 MINUTES - IN FRENCH**

## **ARTIFICIAL NEURAL NETWORKS AND SOCIETY**

### **YOSHUA BENGIO, PROFESSOR, UNIVERSITÉ DE MONTRÉAL, CANADA RESEARCH CHAIR IN STATISTICAL LEARNING ALGORITHMS**

Scientific advances in artificial intelligence have taken everyone by surprise. By vastly increasing the cognitive power of humans, could they result in a new industrial revolution?

**SUNDAY: 1:15 PM**

**LENGTH: 45 MINUTES - IN FRENCH FOR TEENAGERS AND ADULTS**

## **OSIRIS-REX MISSION: EN ROUTE TO BENNU**

### **TIM HALTIGIN, PLANETARY SENIOR MISSION SCIENTIST, CANADIAN SPACE AGENCY**

The OSIRIS-REx spacecraft is currently en route to the asteroid Bennu. Its mission: bring samples back to Earth. An expert will share the secrets of this fabulous adventure.

**SUNDAY: 2:30 PM**

**LENGTH: 45 MINUTES**

## **BECOME A NORTHERN LIGHTS HUNTER**

### **LOIČ QUESNEL, RIO TINTO ALCAN PLANETARIUM**

Can you view the aurora borealis from somewhere nearby? It's possible. Bring your smartphones and tablets, and we'll show you how to maximize your chances.

**SUNDAY: 4:35 PM**

**LENGTH: 40 MINUTES - IN FRENCH**



PHOTO ROLAND LORENTE

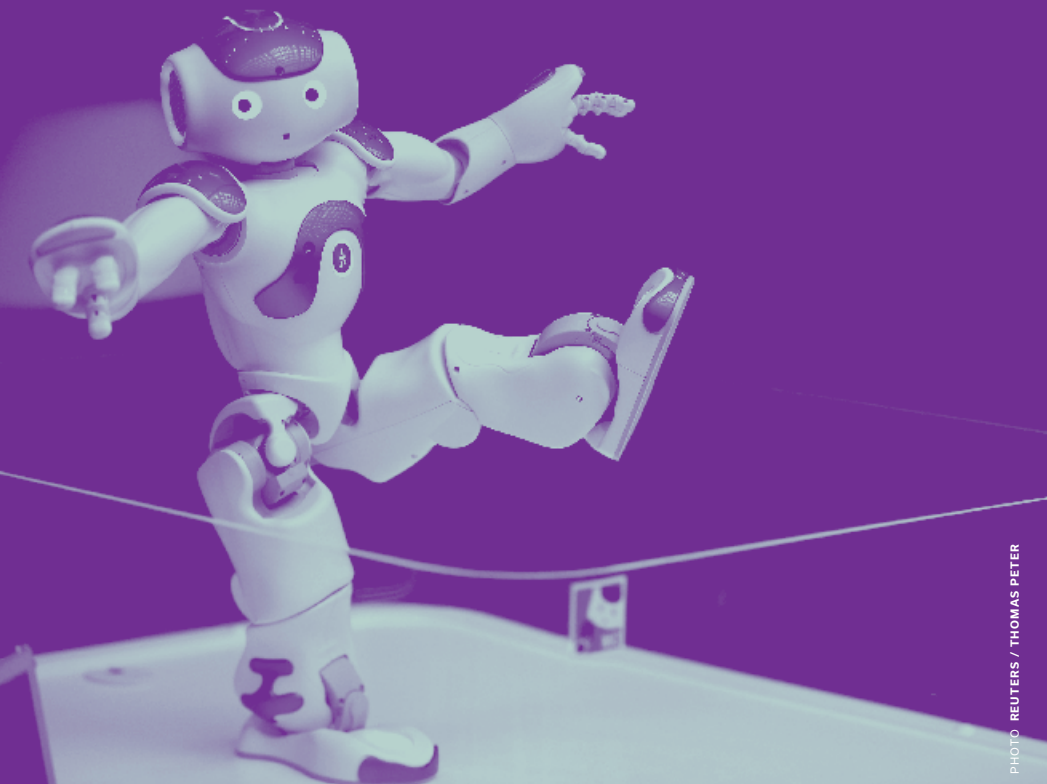


PHOTO: REUTERS / THOMAS PETER

# MAIN STAGE

■ 48

## HUMANOIDS IN EDUCATION

**THIERRY KARSENTI, PROFESSOR, UNIVERSITÉ DE MONTRÉAL, CANADA RESEARCH CHAIR ON TECHNOLOGIES AND EDUCATION**

Is there a place for humanoid robots in education? Definitely! Come meet the NAO team, Pepper and Co., and discover their amazing potential.

**FRIDAY: 9:30 AM  
LENGTH: 35 MINUTES - IN FRENCH**

## THE MAGIC OF CHEMISTRY

**YANNICK BERGERON, CHEMIST**  
Enter the colourful world of chemistry through breathtaking explosive demonstrations. An unforgettable multisensory experience.

**FRIDAY: 10:45 AM; SATURDAY: 3:45 PM;  
SUNDAY: 3:30 PM  
LENGTH: 45 MINUTES - IN FRENCH**

## GRANT PRESENTATION

Fonds de recherche du Québec

Applaud the winners of the Science Goes to School contest. Thanks to the Fonds de recherche du Québec, three classes will receive a well-earned grant to help them develop science activities in their school.

**FRIDAY: NOON  
LENGTH: 20 MINUTES**

## THE SCIENCE OF MOTION, CIRCUS STYLE

### FIZZICAL FIZZICKS

What do you get when you cross circus skills, science concepts and a couple of wacky characters? Fizzical Fizzicks – an interactive, action-packed show about the science of motion.

**FRIDAY: 12:45 PM  
LENGTH: 35 MINUTES**

## THE SHŌ ZAPIENS

The apocalypse has come. Alone in the world, a strange survivor is trying to stay alive. See how he uses science to find brilliant solutions to ordinary problems.

**FRIDAY: 1:45 PM  
LENGTH: 20 MINUTES - BILINGUAL**

## DID YOU SAY “ROBOTS”?

**DOMINIC BOUDREAU, CENTRE DE DÉMONSTRATION EN SCIENCES PHYSIQUES**

We think of robots as futuristic, but some ideas about robots are more than 2 000 years old. Learn what you would need to master before creating a robot.

**SATURDAY: 11 AM  
LENGTH: 45 MINUTES - IN FRENCH**



PHOTO: ROLAND LORENTE

## THE SEA - EYES OF SCIENCE

**LYNE MORISSETTE, MARINE ECOLOGY RESEARCHER**

Marine biologist Lyne Morissette shares the adventures of filmmaker Mario Cyr. An expert at popularizing science, she will reveal the beauty of the ocean and its fascinating biodiversity.

**SATURDAY: 12:15  
LENGTH: 45 MINUTES - IN FRENCH**

## SCIENCE OR MAGIC 3 THE INCREDIBLE EXPERIMENT

**DANIEL COUTU**

Enter the world of magic where irrationality and wonder lead to discovery. Daniel Coutu the magician explores bizarre phenomena with wit and humour.

**SATURDAY: 1:30 PM  
LENGTH: 55 MINUTES - IN FRENCH**



PHOTO: ROLAND LORENTE



PHOTO MELANIE DUSSEAULT

## LEGENDS TAKE FLIGHT

### FALCON-ED

Watch your head! Our birds of prey will be flying just metres away. Don't miss this spectacular show revealing the mysteries of these majestic birds.

**SUNDAY: 11 AM**

**LENGTH: 55 MINUTES - BILINGUAL**

## EXTREME EXPEDITIONS IN THE NAME OF SCIENCE



**STÉPHANE LÉVIN, EXPLORER,  
SPEAKER AND AUTHOR  
INSTITUTE OF DATA OF EXPLORATION  
AND ADAPTATION IN EXTREME  
CONDITIONS**

Follow Stéphane Lévin at the heart of scientific and educational expeditions in extreme environments. Join him in his future mission for the benefit of long-term space flights!

**SUNDAY: 12:45 PM**

**LENGTH: 40 MINUTES - IN FRENCH**

## INSECTS ON STAGE

### BILL BESTIOLE

Catch the entomology bug at this interactive musical show. You'll be wowed by the true nature and ecological importance of insects.

**SUNDAY: 2 PM**

**LENGTH: 55 MINUTES - IN FRENCH**

## FIRE AND ICE

### MAD SCIENCE

Through a bunch of wacky experiments, explore dry ice in its solid, liquid and gaseous form. You won't want to miss the effervescent finale.

**SUNDAY: 4:45 PM**

**LENGTH: 45 MINUTES - IN FRENCH**

## BEATBOXING

### SIMON VAN WEERELD

Travel to a world where humans immerse themselves in robotics via the beatbox. Some robots try to imitate humans. Can this human imitate robots?

**SATURDAY: 2:45 PM**

**LENGTH: 30 MINUTES - BILINGUAL**

## MY LIFE AS A ROBOT

### ZAPIENS

From futuristic robots to others already at work for us, from self-driving cars to talking machines, watch this blend of robotics and AI - past, present and future.

**SATURDAY: 5 PM**

**LENGTH: 45 MINUTES - IN FRENCH**



PHOTO ANDRE CHAREST



PHOTO ROLAND LORENTE

# WORKSHOPS

**CONCOCTING SCIENCE**

## ZONES

■ 21, 22, 24, 25, 26

### 21 **ROBOTIQUE FIRST: ROBOTS FOR REAL**

**ROBOTIQUE FIRST QUÉBEC**

Young people from several schools want to show you the robots they built this year. See their robots in action. You may even get the chance to control them.

**FRIDAY: 9:30 AM – 3:30 PM**  
**SATURDAY: 10:30 AM – 7:30 PM**  
**SUNDAY: 10:30 AM – 6 PM**  
 CONTINUOUS  
 FOR ALL

### 22 **POPSICLE BRIDGE CHALLENGE** **ÉCOLE DE TECHNOLOGIE SUPÉRIEURE (ÉTS)**

Calling all engineering enthusiasts! Build a bridge with popsicle sticks and hot glue and see if it can withstand the crushing loads of a hydraulic press.

**FRIDAY: 9:30 AM – 3:30 PM**  
**SATURDAY: 10:30 AM – 7:30 PM**  
**SUNDAY: 10:30 AM – 6 PM**  
 CONTINUOUS  
 FOR ALL

### 24 **VIBOT THE ROBOT** **KIDS CODE JEUNESSE**

A monkey is in trouble. Vibot to the rescue! Help Vibot take on a variety of jungle challenges by programming his actions with Scratch.

**FRIDAY: 9:30 AM – 11:30 AM**  
 CONTINUOUS  
 RECOMMENDED FOR AGES 7 AND UP

### 25 **PREDATORS AND PREY** **FALCON-ED**

Meet birds of prey face to face. Then, become a detective and dissect their regurgitated pellets to figure out what they eat.

**FRIDAY: 9:30 AM, 10:30 AM**  
 LENGTH: 45 MINUTES  
 RECOMMENDED FOR AGES 6 AND UP

### 26 **YOUR FIRST WEARABLE** **GENIEMOB, IN PARTNERSHIP WITH THE MOUVEMENT MONTRÉALAIS LES FILLES & LE CODE (MMFC)**

Build your own intelligent wristband using various electronic parts.

**FRIDAY: 9:30 AM – NOON**  
 CONTINUOUS  
 RECOMMENDED FOR AGES 6 TO 12

### 25 **TAKE CONTROL OF CANADARM2**

**CANADIAN SPACE AGENCY**

Take control of the Canadarm2 from the International Space Station. Manoeuvre a Lego replica of the famous robotic device used to capture and dock a supply ship.

**FRIDAY: 11:45 AM – 12:45 PM**  
 LENGTH: 45 MINUTES  
 RECOMMENDED FOR AGES 9 AND UP

### 24 **PALAEONTOLOGIST, GRAB YOUR TOOLS!**

**PETRASAPIENS**

Learn the basics of fossilization and “become” a palaeontologist to extract real fossils from a rock. Come see the amazing collection of specimens from the Phanerozoic Eon.

**FRIDAY: 12:15 PM – 1:15 PM**  
 LENGTH: 45 MINUTES  
 RECOMMENDED FOR AGES 7 AND UP

### 26 **MAKERS OF HAPPY PLANTS** **TECHNO CULTURE CLUB, IN PARTNERSHIP WITH THE MMFC**

Wish you had a green thumb to make your plants flourish? Learn how to control the humidity of the soil and the level of room light with micro:bits.

**FRIDAY: 12:30 PM, 1:30 PM AND 2:30 PM**  
 LENGTH: 45 MINUTES  
 RECOMMENDED FOR AGES 9 AND UP

### 25 **FILM SHOOT** **CYBERCAP**

Have you ever wondered how Superman flies in the movies? Discover the green screen, one of the most popular visual effects techniques in TV and film.

**FRIDAY: 2 PM, 2:30 PM AND 3 PM**  
 LENGTH: 25 MINUTES  
 RECOMMENDED FOR AGES 11 AND UP

### 24 **DO YOU HAVE A SIXTH SENSE?** **JAZMIN SARAÍ PERFUMES**

Do you have a sixth sense? Combine music, images and scents and observe the emotions they arouse in you. Your creation may surprise you.

**FRIDAY: 2:30 PM – 3:30 PM**  
 CONTINUOUS  
 RECOMMENDED FOR AGES 7 AND UP

### 25 **ILLUMINATED ROBOT** **RUELLE DE L'AVENIR**

Assemble your paper robot and watch its antenna light up. Learn how an electrical circuit works and take your creation home.

**SATURDAY: 10:30 AM, 11:15 AM AND NOON**  
 LENGTH: 30 MINUTES  
 RECOMMENDED FOR AGES 8 AND UP

**26 CODING ROBOTS**  
MACARRIÈRETECHNO,  
IN PARTNERSHIP WITH THE MMFC

Learn how to send commands to a robot with Python, a language used by professional programmers.

**SATURDAY: 10:30 AM, 11:30 AM  
AND 12:30 PM**  
**LENGTH: 45 MINUTES**  
**RECOMMENDED FOR AGES 12 AND UP**

**24 MATHEMAGIC**  
AMAZINGMATHS

We challenge you to figure out the secret behind each of our amazing magic tricks. Hint: it's all mathematics.

**SATURDAY: 10:45 AM, 11:30 AM  
AND 12:15 PM**  
**LENGTH: 30 MINUTES**  
**RECOMMENDED FOR AGES 8 AND UP**

**25 GREEN BOMBARDMENT**  
WORLD WILDLIFE FUND CANADA  
(WWF-CANADA)

Do you dream of greening the city? Make clay balls filled with seeds and bombard the city with plant biodiversity.

**SATURDAY: 1:15 PM, 2 PM AND 2:45 PM**  
**LENGTH: 30 MINUTES**  
**RECOMMENDED FOR AGES 7 AND UP**



PHOTO MÉLANIE DUSSEAUT

**26 TECHNOMAGIC**  
GROWING WITHOUT BORDERS,  
IN PARTNERSHIP WITH THE MMFC

Develop a video game, animate objects, and make music with fruit. You can create interactive artistic masterpieces through the magic of digital technology.

**SATURDAY: 1:45 PM, 2:30 PM AND 3:15 PM**  
**SUNDAY: 3:30 PM, 4:15 PM AND 5 PM**  
**LENGTH: 30 MINUTES**  
**RECOMMENDED FOR AGES 7 AND UP**

**24 MAKING MAGIC**  
RÉSEAU TECHNOLOGIE

Are you ready to make some magic? Create a magic wand, mini fireworks and square bubbles!

**SATURDAY: 1:45 PM, 2:45 PM AND 3:45 PM**  
**LENGTH: 45 MINUTES**  
**RECOMMENDED FOR AGES 6 AND UP**

**25 HOME AUTOMATION**  
PROFAQUA

You can take remote control of your entire home while you're curled up on your sofa. Just one click is enough to turn off the lights and turn up the music.

**SATURDAY: 4 PM, 5:15 PM AND 6:30 PM**  
**LENGTH: 60 MINUTES**  
**RECOMMENDED FOR AGES 9 AND UP**

**26 BUG-BOT**  
LES SCIENTIFINES,  
IN PARTNERSHIP WITH THE MMFC

Make a robot out of everyday objects. All it takes is a battery, a motor, a little imagination and some scientific inspiration to turn a clothespin into a vibrating insect.

**SATURDAY: 4:15 PM, 5:15 PM AND 6:15 PM**  
**LENGTH: 45 MINUTES**  
**RECOMMENDED FOR AGES 9 AND UP**



PHOTO MÉLANIE DUSSEAUT

**24 BOARD GAMES**  
LA RÉCRÉATION,  
CAFÉ CULTUREL ET LUDIQUE

Wake up your senses and exercise your balance, speed and strategy with board games for every age and taste.

**SATURDAY: 5 PM - 7:30 PM**  
**CONTINUOUS**  
**RECOMMENDED FOR AGES 6 AND UP**

**25 ROBOTIC INSECTS**  
MAD SCIENCE

Nature's secrets revealed through the study of biomimetics and the engineering of living things. Your challenge: build a mechanical insect to discover the biological strategies of moving on six legs.

**SUNDAY: 10:30 AM - 12:30 PM**  
**CONTINUOUS**  
**RECOMMENDED FOR AGES 5 AND UP**

**26 PROGRAMMERS WANTED**  
GIRLS LEARNING CODE,  
IN PARTNERSHIP WITH THE MMFC

Learn how to program a video game using Scratch, and configure a cool joystick with MakeyMakey.

**SUNDAY: 10:30 AM AND 11:30 AM**  
**LENGTH: 45 MINUTES**  
**RECOMMENDED FOR AGES 9 AND UP**

**24 PICASSO WITHOUT PAINT**  
CRÉATIONS HORAGAI

Put away your paints and brushes! Instead, create a work of art using the properties of materials. You will decode some scientific phenomena while creating an original masterpiece.

**SUNDAY: 10:45 AM, 11:30 AM AND 12:15 PM**  
**LENGTH: 30 MINUTES**  
**RECOMMENDED FOR AGES 5 AND UP**



PHOTO MÉLANIE DUSSEAULT

**25 CYBORG ARM**  
MILSUITE FX CREATIONS

Learn the secrets of special effects and create your own cyborg limb. Using silicone, electronic components and make-up, transform your hand or arm into a mechanism that's half-human and half-robot.

SUNDAY: 12:45 PM, 1:45 PM AND 2:45 PM  
LENGTH: 45 MINUTES  
RECOMMENDED FOR AGES 8 AND UP

**26 MICRO:BIT LIGHT PATTERNS**  
KIDS CODE JEUNESSE,

IN PARTNERSHIP WITH THE MMFC  
Imagine a computer that fits in the palm of your hand! Program integrated LEDs to display shapes, sequences, and messages.

SUNDAY: 1 PM AND 2 PM  
LENGTH: 45 MINUTES  
RECOMMENDED FOR AGES 7 AND UP

**24 MAKING CONNECTIONS**  
LES NEURONES ATOMIQUES

Serial or parallel connection? Which should you choose and how will it affect connected devices? Try to connect everything without causing any short circuits.

SUNDAY: 1:15 PM, 2 PM, AND 2:45 PM  
LENGTH: 30 MINUTES  
RECOMMENDED FOR AGES 8 AND UP

**24 SCIENCE ILLUSTRATED**  
MICROFICHES

For this activity, you'll need to combine art and science. Learn how to popularize a concept using words and images, and contribute to a collection of science microfiches.

SUNDAY: 3:45 PM AND 4:45 PM  
LENGTH: 45 MINUTES  
RECOMMENDED FOR AGES 6 AND UP

**25 REINVENTING THE WHEEL**  
INSTITUT DES SCIENCES

MATHÉMATIQUES  
Square, round or polygonal wheels... Cleverly designed sewer pipes... Come see our hodgepodge of mathematical curiosities that will change your idea of rotation.

SUNDAY: 4 PM - 6 PM  
CONTINUOUS  
RECOMMENDED FOR AGES 7 AND UP



PHOTO ROLAND LORENTE

# CURIOSLY MONTRÉAL

FESTIVAL EURÊKA, a veritable open-air laboratory, arouses both curiosity about and interest in science. By promoting science knowledge, Montréal aims to be creative, innovative and inspiring.



**YOU'VE  
GOT WHAT  
IT TAKES!**



**TRUST IN YOURSELF.**

Explore **science** and **technology**

[economie.gouv.qc.ca/tout-ca-en-toi](http://economie.gouv.qc.ca/tout-ca-en-toi)

ENSEMBLE   
on fait avancer le Québec

Québec 

# The great Télé-Québec experiment!



**GÉNIAL!**  
Monday to Thursday  
at 7 p.m.



**EURÊKA!  
IT'S GÉNIAL!**  
Don't miss the GÉNIAL!  
live show  
Saturday, June 9,  
at 8 p.m.  
At the Main Stage

telequebec.tv



**NINTENDO  
LABO™**

Toy-Con 01 VARIETY KIT

**Nintendo Labo. Powered by Nintendo Switch.**

<b>MAKE</b>	<b>PLAY</b>	<b>DISCOVER</b>



**NOW AVAILABLE**  
Learn more at [NintendoLabo.ca](http://NintendoLabo.ca)



Nintendo Switch system required (sold separately). Multiple systems shown with use of a single Toy-Con Variety Kit. © 2018 Nintendo. Nintendo Labo and Nintendo Switch are trademarks of Nintendo.





**WIRED FOR RESEARCH**

INRS.CA

**INRS**  
UNIVERSITÉ DE RECHERCHE  
A RESEARCH UNIVERSITY



Something **BIG** is happening  
in **Montreal**

Making Montréal and Québec an internationally recognized economic and scientific hub for research, training, technology transfer and value, employment and business development in big data operation and analysis for decision-making.



**IVADO.CA**



**RioTinto**

**Proud partner of the Eureka! Festival**

Rio Tinto is proud to support the Eureka! Festival which awakens the passion in our youth for science, technology and innovation.

**FOLIE TECHNIQUE**

SCIENCE ACTIVITIES  
POLYTECHNIQUE MONTRÉAL

Explore the worlds of science, mathematics, engineering and technology through creative, interactive, accessible activities at your school or at a Folie Technique summer day camp.



[folietechnique.com](http://folietechnique.com)  
514 340-5856 //   folietechnique

100 MILLIONS D'IDÉES | UQÀM



**Voir clair dans le rôle de l'eau**

Percer les secrets des interactions entre l'eau et les écosystèmes pour mieux conserver le territoire ?

**Une idée brillante.**

# EU RÊ KA!

L'ÎLE  
DU  
SAVOIR



IN COLLABORATION WITH

RioTinto

MEDIA PARTNER



NATURE ZONE



SPONSOR



CENTRAL STAGE



WITH FINANCIAL SUPPORT FROM



ASSOCIATED SPONSORS

