## Date:
**Tuesday and Wednesday June 5 and 6, 2018**

## Time:
Full days (08:00 to 17:00)

## Check In:
Tuesday, June 5**^{\text{th}}** at 08:00

## Location:
École de Technologie Supérieure (ETS), Salle des Pas Perdus
1100 Notre-Dame Street West, Montreal
Paid parking available in Building B
at 1111 Notre Dame West Street via Jean d’Estreess Street

## Organization:
Montreal SMPTE Committee

## Sponsorship:
SMPTE Montreal

## Topics:
**Day 1: Real-time IP Media, An Update**
**Day 2: Traditional broadcast vs OTT, a world evolving**

## IMPORTANT:
- to participate in this training, please register via [Eventbrite](https://www.smpte.org/sections/montrealquebec).
- We will be presenting these two days in streaming for participants outside the greater Montreal area as well as organizations and businesses.
- If you are interested in this option, please contact smptemtl@gmail.com for cost and login information.

Your Montreal Chapter of SMPTE is pleased to invite you, on June 5 and 6, to two training days on two current topics:

- **Day 1: IP Media in Real Time, An Update**
- **Day 2: Traditional broadcast vs OTT, a changing world**

This event will also be a great opportunity to network with people in the industry and discuss the changes we face.

Here is a preview of the two-day schedule:

### AGENDA

#### Day 1: Real-time IP Media, an update

Opening of the first day with an overview of the entire system, an explanation of the terms, the positioning of the standards, the presentation of an overall drawing that will serve as a "reference" for the rest of the day.

**08:00** Registration and networking

**08:25** Introduction, Logistics and context of the seminar (fr)  
Presenters: Michel Proulx (SAIT) and Daniel Guévin (SRC).

**08:50** Day 1 Introduction (fr)
- An overview of the complete system, explanation of the terms, positioning of the standards, overall scheme that will serve as a reference for the rest of the day
- A brief overview of the remaining gaps and challenges in the world of IP video such as:
  - Wide vs Narrow
  - Complexity of the configuration
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09:20 IP for the media: "Deep Dive" update # 1: Progress of the standards (fr)
- Status: Status of SMPTE ST-2110
- Status: Wide vs Narrow
- PTP V2.1, PTP System Design; what remains to be settled
- Status: NMOS (IS-04, IS-05, IS-06?)

10:05 Break

10:20 IP for Media "Deep Dive" Update # 2: Network, Topology and Control (fr)
- Network, Topology
- Goals: Resiliency to failure, Cost, Scale, Security
- Non Blocking Unicast vs Multicast
- Control / Connection Management: SDN vs IGMP

11:15 IP for Media Deep Dive Update 3: ST2110 implementations for Software Applications (fr)
Point of View 1: SMPTE-2110 on 100% COTS Hardware
- what are the issues
- what are techniques for solving issues ideally including use of Melanox IP card.

12:00 Lunch (ETS cafeteria)

13:00 Afternoon session start and introduction (fr)
Presenter: François Legrand (SRC)

13:05 IP Facility Case Study 1: NEP
- Part 1: Overall System Elements
- Part 2: Cameras and production switchers

13:50 IP Facility Case Study 2: Mobile or UHD Studio on IP (fr)
Presenter: Daniel Collin (Grass Valley)

14:05 The Status on Production Tools in IP (fr)
- Survey of Devices from Camera to Servers
- 25GE vs 10GE
- Interfaces IP en bolt on non optimal
- UHD quad flow vs single flow.

15:40 IP Facility Case Study 3: Maison Radio Canada Update (fr)
Presenter: Félix Poulin (SRC)

16:30 Panel on IP for real time Media Featuring Presenters and End Users that participated in the event (fr/en)
Présentateur: Michel Proulx (SAIT).

17:20 Happy Hour

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https://www.smpte.org/sections/montrealquebec

NOTICE-NOTICE-NOTICE
PRESENTATION OPEN TO ALL BUT RSVP ON EVENTBRITE
PLEASE POST... PLEASE POST... PLEASE POST
**S.M.P.T.E.**
Montréal / Québec / Ottawa Chapter

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**Day 2: Day 2: Delivering Television to Viewers - An Evolving Landscape**

08:00 Registration and networking

08:30 Introduction and Context for the Day - The Evolving TV Delivery Landscape (fr)
Presenters: Michel Proulx (SAIT)

09:05 Part 1: The Business of OTT around the world and in Canada a look at Subscriber counts and revenue flows (Presentation OTM)
Presenter: Andrea Sharkey (Media Technology Monitoring CBC / Radio Canada)

09:55 OTT Technology Update Part 1: Overview of OTT Delivery system from end to end Survey of key components in system
Presenters: Piotr Czzekala (Insys Video Technology)

10:45 Break

11:00 OTT Technology Update Part 2: Deeper Dive: Streaming, Codecs and Players, 4K, HDR...
Presenter: Luc Trudeau (Mozilla)

11:45 OTT Case Study: SimpliTV - OTT service for Austria's National Broadcaster
Presenter: Piotr Czzekala (Insys Video Technology)

12:10 Lunch (ÉTS cafeteria)

13:05 Part 2: Delivering Television over The Air

13:15 ATSC-3 - A Technology primer (fr)
An overview of ATSC-3 system capabilities
- Comparison ATSC-3 and ATSC
- Modulation
- IP transport and what it means
- Codecs, resolutions, HDR
Presenters: Guy Bouchard (Télé-Québec), Charles Rousseau (SRC)

14:15 Open Discussion with Audience About ATSC-3 (fr)
Presenters: Michel Proulx (SAIT), Guy Bouchard (TQ), Charles Rousseau (SRC)

14:45 Video over Wireless Communications Networks (en)
- Part 1: Technology Basics of 5G
- Part 2: Delivering Video over Wireless Networks
Presenter: Tho Le-Ngoc (Mc Gill University)

15:45 Break

15:55 Case Study: Video over Wireless Communications Networks (en)
Presenter: Arefin Khan (Huawai Networks)

16:30 Panel: ATSC-3 vs 5G for delivering TV in the future (fr / en)
- Technology
- Regulation,
- Business
Leader: Michel Proulx
Panelistes : Charles Rousseau, Guy Bouchard, Dany Harrison, Tho Le-Ngoc, Arefin Khan

17:15 Conclusion et Closing (f)

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PRESENTATIONS LANGUAGES

Given the provenance of our guests, several presentations will be given in English.

REGISTRATION

The registration will start at 07:30.

START AND ORDER OF PRESENTATIONS

The presentations will begin at 08:00.

The order of the presentations described in this notice is not final. A final version of the agenda will be forwarded to you in due course.

TICKET PURCHASE:

This event has costs. The amount due is required at registration.

Individual or group registrations are via the Eventbrite website at:

https://bootcamp_smpte_2018.eventbrite.ca

The number of places is limited. First come, first booked !!!!

Registration fees:

- General Registration: $500 (taxes included)
- Student registration: Free (limited places)

* Registration for both days includes one year registration at the SMPTE. For those who are already members in good standing, their membership will be extended by one year.

** Students will be required to show their student ID card in good standing the moment of their registration

*** For students, SMPTE membership fees are free for the first time year for students. Click here to join

Payment Method: Credit Cards Only (Mastercard, Visa or American Express)

In addition to access to attend the presentations, registration fees include:

- morning welcome (coffee and pastries)
- morning and afternoon coffee breaks
- coupon for the lunch
- 4 @ 6 (Happy Hour) (June 5)
- sales taxes (GST and QST)
STREAMING

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PLANNING TEAM (alphabetical order):

Editorial and Presentations: Denis Bonneau, Alexandre Dugas, Jonathan Dupras, Gaétan Gauthier, François Legrand, Pierre Marion, Michel Proulx.

Coordination, logistics, communications: David Beaulieu, Daniel Despa, François Bourdua, Daniel Guévin, Mike Poirier, Violaine Tremblay, Johanne Truesdell

Your questions, comments and suggestions are welcome at smptemtl@gmail.com