WORKSHOP ON DYNAMIC MICROSCOPY, Place Bonaventure, Montréal, 800 De La Gauchetière Street West, IN THE NORTH-WEST TOWER, on the 6th floor

May 9th

09.00 – 09.10 Introduction – F. Rosei, B.J. Siwick, T. LaGrange

09.10 – 09.30 F. Legare – New perspectives in Ultrafast Laser Science

09.30 – 09.50 T. LaGrange – A Brief Synopsis of the State of Art in High-time Resolution Electron Microscopy

09.50 – 10.10 B. Reed – The Technology and Physical Limits of Dynamic TEM

10.10 – 10.30 B.J. Siwick – Radio-frequency cavities are just another electron optic: Pushing the limits in ultrafast electron microscopy.

10.30 – 10.50 G. Campbell – Time resolved quantification of phase transformations and reactions in materials using the DTEM

10.50 – 11.20 Coffee Break

11.20 – 11.45 H. El Sayed Ali – Ultrafast Structural Dynamics of Surfaces and Thin Films Studies by Electron Diffraction

11.45 – 12.10 R. Herring – Imaging and Manipulation of Quasiparticles, Atoms and Electrons Using UVic's Scanning Transmission Electron Holography Microscope (STEHM)

12.10 – 12.35 D. Masiel (IDES) – Commercializing across Disciplines: The Present and Future of the DTEM Marketplace

12.35 – 13.00 H. Ruda – Influence of defects on nanowire properties

13.00 – 14.30 Lunch

14.30 – 14.55 J. Dubowski – Technology of semiconductor-organic nano-interfaces: dynamics of functionalization and biosensing

14.55 – 15.20 G. Fanchini – Thermo-optical properties of graphene layers

15.20 – 15.45 A. McLean – Domain boundaries, kinks and vertices

15.45 – 16.10 R. Vogelgesang – Near field optical investigations of plasmonic nanostructures; towards ultimate spatio-temporal resolution.

16.10 – 16.40 Coffee Break

16.40 – 17.05 A. Pearson – Elucidating virus-host interactions through microscopy

17.05 – 17.30 N. Doucet – Studying the appropriate timescale: a dynamic view of enzyme catalysis

17.30 – 17.55 C. Silva – Charge photogeneration Dynamics in semicrystalline polymeric semiconductors

17.55 – 18.20 M. Singh – Single Photon Switching in Quantum Dots Doped in Excitonic and Photonic Materials

18.20 – 18.30 M. Nicklaus – Dynamic TEM on novel memory devices–complementary instrumentation: picosecond scanning probe microscopy

18.30 – 19.00 M. Clerici – Ultrafast Optical-Electron based Pump and Probe Imaging

Discussion group topics for May 10th and 11th:

Plasmonics & Excitonics;
Phase Transitions & Crystallization;
Catalysis, Surfaces and Interfaces;
Biomedical

May 10th

09.30 – 11.00 Panel discussion
Panel members:
T. Lagrange, B. Siwick, B. Reed, C. Silva, G. Campbell, F. Legare,

11.00 – 11.30 Coffee Break

11.30 – 13.00 Discussion groups – each discussion group has a group leader; drafting text

13.00 – 14.30 Lunch

14.30 – 16.30 Discussion Groups, drafting text

16.30 – 17.00 Coffee Break

17.00 – 18.30 Back to panel discussion with group leaders summarizing main points from the discussion groups.

18.30 Dinner

May 11th

09.30 – 11.00 Follow up Discussion Groups; drafting text

11.00 – 11.30 Coffee Break

11.30 – 13.30 Discussion Groups; polishing text; Conclusions

13.30 – 15.00 Lunch

15.00 – End of workshop.