

Sixth Annual Minisymposium on Computational Methods for
Three-Dimensional Microscopy Reconstruction

August 5, 2015

City University of New York, Graduate Center, 365 Fifth Avenue, Room 4102

Organized by: **Gabor T. Herman (CUNY)** and **Joachim Frank (Columbia University)**

PROGRAM:

- 9:20 - 9:30 **Gabor T. Herman (CUNY, New York):** *Welcome*
- 9:30 - 10:15 **Jose-Maria Carazo (CNB, Universidad Autonoma, Madrid):**
3D particle alignment in frame stacks using optical flow
- 10:15 - 11:00 **Amedee des Georges (Columbia University, New York):**
Molecular gating mechanism of the calcium release channel
- 11:00 - 11:15 *Coffee Break*
- 11:15 - 12:00 **Hstau Liao (Columbia University, New York):**
An efficient approach to 3D covariance estimation from cryo-EM images
- 12:00 - 12:45 **Clint Potter (New York Structural Biology Center, New York):**
Workflow for 3DEM: Lessons learned from the Appion project
- 12:45 - 2:15 *Lunch break*
- 2:15 - 3:00 **Marcelo V. W. Zibetti (Universidade Tecnológica Federal do Paraná, Curitiba, PR):** *Fast high-resolution tomographic reconstruction*
- 3:00 - 3:45 **Edgar Garduno (Universidad Nacional Autonoma de Mexico, Mexico, DF):** *Reconstruction from projections using shearlets*
- 3:45 - 4:00 *Coffee Break*
- 4:00 - 4:45 **Andreas Alpers (TU Muenchen, Munich):**
Tessellation inversion for three-dimensional microscopy
- 4:45 - 5:30 **Zhizhen Zhao (NYU, New York):**
Fast steerable principal component analysis for processing large EM data sets
- 5:30 - 5:40 **Joachim Frank (Columbia University, New York):** *Auf Wiedersehen*

This meeting is open to all and there is no registration fee. If you intend to come, then please send a note with your name, affiliation and e-mail address to Masgan Saidi <ms4597@cumc.columbia.edu>.