

Computational Issues in Oil Field Applications Tutorials

Tuesday March 21, 2017

- 8:00–8:55 *Check-In/Light Breakfast (Hosted by IPAM)*
- 8:55–9:00 *Welcome and Opening Remarks*
- 9:00–10:30 **Mrinal Sen** (University of Texas at Austin)
Global Geophysical Inversion and Uncertainty Quantification
- 10:45–11:00 *Break*
- 11:00–11:45 **Sanjay Srinivasan** (Pennsylvania State University)
Modeling of complex reservoirs: An excursion into mp Geostatistics and new data integration paradigms (I)
- 12:00–12:30 *Core Orientation with IPAM Staff*
- 12:30–2:00 *Lunch (on your own)*
- 2:00–2:45 **Sanjay Srinivasan** (Pennsylvania State University)
Modeling of complex reservoirs: An excursion into mp Geostatistics and new data integration paradigms (II)
- 3:00–3:15 *Break*
- 3:15–4:45 **Knut--Andreas Lie** (SINTEF)
Introduction to reservoir simulation as practiced in industry

Wednesday March 22, 2017

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:30 **Albert Reynolds** (University of Tulsa)
Assisted History Matching
- 10:45–11:00 *Break*
- 11:00–11:45 **Matt Balhoff** (University of Texas at Austin)
Pore-scale physics and large-scale flow simulation (I)
- 12:00–2:00 *Lunch (on your own)*
- 2:00–2:45 **Matt Balhoff** (University of Texas at Austin)
Pore-scale physics and large-scale flow simulation (II)
- 3:00–3:15 *Break*
- 3:15–4:45 **Jan-Dirk Jansen** (Delft University of Technology)
Model-based optimization of oil and gas production



Thursday March 23, 2017

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:30 **Yalchin Efendiev** (Texas A&M University - College Station)
Numerical homogenization, upscaling, and multiscale methods for problems in heterogeneous media (I)
- 10:45–11:00 *Break*
- 11:00–11:45 **Wing Tat Leung** (Texas A&M University - College Station)
Numerical homogenization, upscaling, and multiscale methods for problems in heterogeneous media (II)
- 12:00–2:00 *Lunch (on your own)*
- 2:00–3:15 **David Lumley** (University of Texas at Dallas)
Quantitative 3D+4D seismic imaging, inversion and monitoring inside the earth (I)
- 3:15–3:30 *Break*
- 3:30–4:45 **David Lumley** (University of Texas at Dallas)
Quantitative 3D+4D seismic imaging, inversion and monitoring inside the earth (II)

Friday March 24, 2017

- 8:00–9:00 *Check-in/Breakfast (hosted by IPAM)*
- 9:00–10:30 **Hamdi Tchelepi** (Stanford University)
Overview of multiscale/multiphysics reservoir simulation
- 10:45–11:00 *Break*
- 11:00–11:45 **Kris Jessen** (University of Southern California (USC))
Compositional modeling
- 12:00 *Conclusion*

