

Open Problems in Loop Quantum Gravity
Sunday, February 28 - Thursday, March 4, 2010
Zakopane, Poland

Talk schedule

SUNDAY

Spin foam models

- 12:00 Roberto Pereira: The new SF models
- 13:00 Aristide Baratin: Group field theory in non-commutative metric variables
- 14:00 Lunch
- 15:00 Wojciech Kamiński: The EPRL intertwiners and correct partition function
- 15:40 Benjamin Bahr: Knotting in the new SF models
- 16:20 Florian Conrady: New results on Lorentzian SF
- 17:00 Coffee break
- 17:30 Discussion

MONDAY

LQG dynamics

- 12:00 Thomas Thiemann: LQG dynamics
- 13:00 Kristina Giesel: gravity, fields, semiclassical limit
- 14:00 lunch
- 15:00 Marcin Domagała: Gravity coupled to scalar field
- 15:40 Johannes Tambornino: the flux representation for LQG
- 16:20 Coffee
- 16:50 Diana Kaminski: Holonomy grupoid formulation of LQG
- 17:30 Jorge Pullin: spherically symmetric LQG
- 18:10 Discussion

TUESDAY

LQG and more

- 12:00 Carlo Rovelli: SF give a new dynamics to Canonical LQG
- 13:00 Bianca Dittrich: diffeomorphism in discrete gravity

14:00 Lunch

15:00 James Ryan: phase space of discrete BF theory and LQG

15:40 Jesper Grimstrup: Coupling fermions to LQG by using the non-commutative spectral action

16:20 Coffee

16:50 Yongge Ma: Emergence of scalar matter from spinfoam model

17:30 Discussion

WEDNESDAY

Continuum/Semiclassical Limits

12:00 Lorenzo Sindoni: Continuum approximation of microscopic quantum dynamics: lessons from condmat systems and analog gravity models

13:00 Benjamin Bahr: LQG coherent states

13:40 Lunch

14:40 Etera Livine: $U(N)$ structure of LQG states and its implications for semiclassical limit

15:20 Florian Girelli: Semi-classical spaces and spinfoams: facts and questions

16:00 Coffee

16:30 Frank Hellmann: the asymptotics of spin foam models

17:10 Claudio Perini: Relation between LQG and SF coherent states

17:50 Discussion

THURSDAY

LQG/SF

12:00 Lionel Mason: Twistors and Feynman amplitudes

13:00 Adam Henderson: what LQC tells us about the relation between LQG and SF

13:40 Lunch

14:40 Martin Bojowald: Effective dynamics

15:20 Madhavan Varadarajan: Polymer quantization

16:20 Coffee

17:10 Ashtekar: Closing/summary/future directions talk