ÉCOLE DE PHYSIQUE des HOUCHES





Structures in local quantum field theory

Summer school Les Houches — June 7-25, 2010

Scientific Advisory Committee: Spencer Bloch (U. Chicago), D. Broadhurst (Open U.), Francis Brown (I. Math. Jussieu), Nigel Glover (Durham U.), Dirk Kreimer (IHES)

Topics include:

- Perturbative quantum field theory, Hopf algebras and renormalization
- Feynman diagrams, Hodge structures and algebraic geometry
- AdS/CFT correspondence and Britto-Cachazo-Feng-Witten recursions
- QFT and Dyson–Schwinger equations in gauge theory and quantum gravity

Speakers include:

• Spencer Bloch Ruth Britto David Broadhurst Francis Brown

• Johannes Bluemlein Rigel Glover Gregory Korchemsky Dirk Kreimer

• Matthias Staudacher Matt Szczesny Walter van Suijlekom Karen Yeats

The school will be open by invitation only to approximately 45 participants. Applications should be made after January 20, 2010 and before April 30, 2010. Participants are expected to cover their own travel. In addition, the cost of the school, including full board and accommodation, will be 750 Euros.

See http://math.bu.edu/people/dkreimer/houches/houches.html or http://houches.ujf-grenoble.fr/ for school and registration details.

Our thanks to the following organizations for partially funding the conference: Institut des Hautes Etudes Scientifiques (www.ihes.fr)

Clay Mathematics Institute (www.claymath.org)

Institut Henri Poincaré (www.ihp.jussieu.fr)

Conference organizers:

Spencer Bloch (Chicago U.), Francis Brown (Inst. Math. Jussieu), Dirk Kreimer (IHES)