

## **New Methods for Quantum Chromodynamics**

The workshop will be held in Edinburgh and Glasgow between 24 - 28 Sept 2012.

### Programme

#### **Monday 24 Sept: Edinburgh, Peter Wilson Building Lecture Room A**

- 10.00 Einan Gardi - "Exploring the IR singularity structure of QCD amplitudes"
- 11.30 Lorenzo Magnea - "The singularity structure of massless scattering amplitudes"
- 13.00 Lunch
- 14.00 Discussion
- 15.00 Claude Duhr - "Potential Corrections to the dipole formula at three loops"
- 16.00 Mark Harley - "Can the factorization and collinear constraints accommodate a four-loop quartic Casimir contribution to the cusp anomalous dimension?"
- 17.00 Discussion

#### **Tuesday 25 Sept: Glasgow, Kelvin Building 253**

- 10.00 Chris White - "Soft gluon exponentiation, the replica trick and webs"
- 11.30 Discussion
- 13.00 Lunch
- 14.00 Claude Duhr - "Hopf algebras, coproducts and symbols: theory and applications"
- 15.30 Discussion

### **Wednesday 26 Sept: Edinburgh, Swann Building 720**

- 9.30 Vittorio Del Duca - "The High Energy Limit"
- 11.00 Mark Harley - "Configuration-space calculation of the cusp anomalous dimension with strictly lightlike Wilson lines"
- 11.45 Giulio Falcioni - "The cusp anomalous dimension with strictly lightlike Wilson lines"
- 13.00 Lunch
- 14.00 Chris White - "BCJ Relations, the double copy and the soft limit"
- 15.30 Samuel Abreu - "Calculation of scalar integrals by dispersion relations"
- 17.00 Discussion

### **Thursday 27 Sept: Edinburgh, Darwin Building 712**

- 9.30 Jennifer Smillie - "Renormalisation of multiparton webs"
- 11.00 Oyvind Almeland - "Multi-loop web calculations in configuration space with non-lightlike Eikonal lines"
- 12.00 Discussion
- 13.00 Lunch
- 14.00 Discussion

### **Friday 28 Sept: Glasgow, Kelvin Building 506**

- 10.00 Discussion: Connected colour factors from non-connected webs
- 12.30 Lunch
- 14.30 Discussion: Open Problems in Combinatorics of Webs (with Mark Dukes)

Workshop Organisers: Einan Gardi, Jenni Smillie, Chris White