

NCSR-D NODE

Costas G. Papadopoulos

NCSR "Demokritos", Athens



UCL, April 2-4 2014

- Costas Papadopoulos
- Chris Wever (postdoc)
- Damiano Tommasini (postdoc)
- Petros Draggiotis (associate)
- G. Zoupanos (NTUA)
- N. Irges (NTUA)
- N. Tracas (NTUA)
- Vassilis Spanos (UoA)
- A. Lahanas (UoA)
- A. Dedes (UoI)
- P. Sphicas ? (UoA)
- E. Christova (UoS)

- C. Papadopoulos
NLO and NNLO calculations; novel methods for integrand-level reduction; simplified differential equation for MI; parton-level MC generators (HELAC-NLO)
- C. Wever and D. Tommasini
Simplified differential equation for MI; OPP at two loops
- P. Draggiotis
NLO calculations; tree-loop duality
- G. Zoupanos
BSM; higher dimensional theories
- V. Spanos, A. Lahanas, A. Dedes, N. Tracas
BSM; supersymmetry; dark matter searches and cosmology; couplings reduction in MSSM
- N. Irges
Higgs mechanism and Gauge-Higgs unification on Lattice

- UDUR: NNLO; 2-loop validation
- DESY: mathematical aspects of two-loop calculations (GP)
- ALUF: 2-loop amplitudes; reduction at the integrand-level techniques
- ETH: NNLO; IBP reduction tools
- FOM: NLO and NNLO automation; mathematical aspects of two-loop calculations
- UGR: OPP extension at two loops
- CERN: Automation at one and two loops

- Excellence program: HOCTools (C. Anastasiou, M. Czakon, M. Worek, A. van Hameren)
- Thalis: DIBOSON (Ch. Petridou, UoTh)
- Thalis: BSM (K. Tamvakis, UoI)

Synergies to be scheduled !

- Outreach activities: Corfu School