

Helsinki Institute of Physics and University of Helsinki

SIC: Kari Enqvist

TEAM

- senior researchers:

- Keski-Vakkuri (strings/string cosmology)
- Katri Huitu (particle phenomenology)
- Hannu Kurki-Suonio (cosmology, Planck)
- Keijo Kajantie (finite T FT, AdS/CFT applied to hot QCD)

- postdocs:

- Gerasimos Rigopoulos (ER)
- Dmitry Podolsky (cosmology)
- Elina Sihvola (Planck)
- Torsti Poutanen (Planck)
- Shinsuke Kawai (strings/cosmology)

- PhD students

- Diana Battefeld (ESR); PhD August '08
- Vesa Muhonen, Sami Nurmi, Niko Jokela; PhD '08
- Vappu Reijonen, Lotta Mether, Andrea Ferrantelli,
Teppo Mattsson, Reijo Keskitalo, Anna-Stina Sirviö, Olli Taanila

TOPICS OF INTEREST (=PAPERS WRITTEN > Oct 2006)

- SUGRA basis for MSSM inflation
- Nflation/multifield inflation
- curvaton models: nongaussianities, preheating
- covariant perturbation theory
- Inhomogeneities and dark energy (LTB, averaging)
- stars & $f(R)$ gravity; metric & Palatini
- susy leptogenesis & gravitino bound
- string gas cosmology
- eternal inflation in the landscape
- $WW \rightarrow$ gravitinos
- Isocurvature fraction in the CMB
- Planck map making

Japanese connection:

Finnish-Japanese Workshop on Particle Cosmology, March '07

Lancashire connection:

Joint researcher training w. John McDonald

CERN connection:

Joint researcher training w. Toni Riotto