

# Geometric Analysis and General Relativity

Thursday, November 21

- 9:30–10:30 **Stefan Hollands** (University of Leipzig)  
“Stability of black holes and thermodynamics”
- 10:40–11:40 **Jeff Jauregui** (Union College)  
“Recent developments on Bartnik’s quasi-local mass”
- 13:00–14:00 **Marcus Khuri** (Stony Brook University)  
“Geometric Inequalities for Quasi-Local Masses”
- 14:10–15:10 **Miyuki Koiso** (Kyushu University)  
“Variational problem for anisotropic surface energy”
- 15:30–16:30 **Koya Sakakibara** (Kyoto University and RIKEN)  
“Numerical analysis of discrete total variation flow  
with manifold constraint”

Friday, November 22

- 9:30-10:30 **Peter Topping** (University of Warwick)  
“Gradient flows for the harmonic map energy”
- 10:40-11:40 **Tatsuya Miura** (Tokyo Institute of Technology)  
“Some estimates of mean curvature integrals for convex surfaces”
- 13:00-14:00 **Lan-Hsuan Huang** (University of Connecticut)  
“Minimal mass extensions and vacuum stationary”
- 14:10–15:10 **Asuka Takatsu** (Tokyo Metropolitan University)  
“Equality in the logarithmic Sobolev inequality”
- 15:30–16:30 **Michiaki Onodera** (Tokyo Institute of Technology)  
“Foliated solutions to Bernoulli’s free boundary problem”
- 16:40–17:40 **Makoto Nakamura** (Yamagata University)  
“On the semilinear partial differential equations  
in homogeneous and isotropic spacetimes”

Saturday, November 23

- 9:30–10:30 **Ngo Quoc Anh** (VNU University of Science and University of Tokyo )  
“A new point of view on the solutions to  
the Einstein constraint equations with arbitrary mean curvature”
- 10:40-11:40 **Richard Schoen** (University of California, Irvine)  
“The problem of quasi-local mass in general relativity”