

WINTER SCHOOL “GEOMETRIC EVOLUTION EQUATIONS”
KONSTANZ, MONDAY 05.02.2018 – FRIDAY 09.02.2018, F 426

Follow the yellow signs to room F 426 at the end of building F on the 4th floor. From the bus stop “Universität” you enter the building A on the 5th floor. Buildings A and F belong to the same connected component of the university.

Monday, 05.02.2018.

- 10:00–11:00: 21: Klaus Kröncke
- 11:00–11:45: Coffee Break in F 441
- 11:45–12:30: 23: Boris Vertman
- 12:30–14:00: Lunch; Coffee from 13:30 in F 441
- 14:00–15:00: 31: Miles Simon: Ricci flow and singularities in 4d: Introduction
- 15:00–15:45: Coffee Break in F 441
- 15:45–16:45: 29: Oliver Schnürer: Introduction to mean curvature flow (MCF)
- 17:00–18:00: Talk not from organising groups

Tuesday, 06.02.2018.

- 09:00–10:00: 31: Miles Simon: Ricci flow and singularities in 4d:
Bounded scalar curvature case
- 10:15–10:45: 31: Miles Simon: Convergence of Riemannian manifolds
in various settings (Tutorial)
- 10:45–11:30: Coffee Break in F 441
- 11:30–12:30: 29: Oliver Schnürer: Evolution equations and
MCF without singularities
- 12:30–14:00: Lunch; Coffee from 13:30 in F 441
- 14:00–15:00: 23: Boris Vertman
- 15:00–15:45: Coffee Break in F 441
- 15:45–16:45: 21: Klaus Kröncke
- 17:00–17:45: 29: Wolfgang Maurer, Oliver Schnürer:
Computing evolution equations (Tutorial)
- 19:45–22:00: Dinner: Tolle Knolle, Bodanplatz 9

Wednesday, 07.02.2018.

- 09:00–10:00: 23: Boris Vertman
- 10:15–10:45: 23: Boris Vertman
- 10:45–11:30: Coffee Break in F 441
- 11:30–12:30: 31: Jiawei Liu: The conical Kähler-Ricci flows and their limiting
flows (research talk)
- 12:30–14:00: Lunch; Coffee from 13:30 in F 441
- 14:00–15:00: Talk not from organising groups
- 15:00–15:45: Coffee Break in F 441
- 15:45–16:30: 21: Klaus Kröncke
- 16:45–17:15: 29: Wolfgang Maurer: Irregular behaviour of solutions
+ Discussion
- 17:30–18:00: Discussion

Thursday, 08.02.2018.

- 09:00–10:00:** 21: Klaus Kröncke
- 10:15–10:45:** 21: Klaus Kröncke
- 10:45–11:30:** Coffee Break in F 441
- 11:30–12:30:** 23: Boris Vertman
- 12:30–14:00:** Lunch; Coffee from 13:30 in F 441
- 14:00–14:45:** 31: Wolfgang Meiser: Introduction to Orbifolds and Orbifold Ricci flow
- 14:45–15:45:** Coffee Break in F 441
- 15:45–18:00:** Individual discussions

Friday, 09.02.2018.

- 09:30–10:30:** 29: Wolfgang Maurer: Avoiding classical solutions and uniform estimates near infinity
- 10:30–11:15:** Coffee Break in F 441
- 11:15–12:00:** Discussion / problem session / open problems
- 12:00–14:00:** Lunch

Organising Projects:

- 21, Klaus Kröncke, Hamburg: Stability and instability of Einstein manifolds with prescribed asymptotic geometry
- 23, Boris Vertman, Oldenburg: Spectral geometry, index theory and geometric flows on singular spaces
- 29, Oliver Schnürer, Konstanz: Curvature flows without singularities
- 31, Miles Simon, Magdeburg: Solutions to Ricci flow whose scalar curvature is bounded in L^p

Abstracts.

Jawei Liu: The conical Kähler-Ricci flows and their limiting flows

In this talk, I will show the long-time existence, uniqueness, regularity and convergence of the conical Kähler-Ricci flow with weak initial data which admits L^p -density for some $p > 1$. Then I will talk about the limiting flows of the conical Kähler-Ricci flows when the cone angles tend to zero.