

## S2B3 - Hauptseminar Globale Analysis - Gradient Flows on Metric Spaces

Monday, 16.15 via zoom, from October 26, on.

The seminar will follow the manuscript "Gradient flows on metric spaces" which is available on request (just ask for the sciebo-link via e-mail to [eva.kopfer@iam.uni-bonn.de](mailto:eva.kopfer@iam.uni-bonn.de)).

The suggested topics for the talks are:

1. 1.1 – 1.3: Metrics, curves, speed
2. 1.4 + 1.5: Length spaces
3. 2.1 – 2.4: Semiconvex functions on intervals
4. 2.5 + 2.6: Semiconvex functions on geodesic spaces
5. 3.1 + 3.2: Slopes, upper gradients, geodesic Hessians
6. 4.1: Gradient flows in EVI sense
7. 4.2 + 4.3:  $EVI(K,N)$  flows
8. 4.4 + 4.5: Variable  $k$ , convexification
9. 5.1 – 5.3: Alexandrov spaces
10. 5.4 + 5.6: CAT spaces
11. 5.5: Existence proof for EVI flows
12. 6: Gromov-Hausdorff convergence

Optional: 3.3, 4.6: Hopf-Lax semigroup, time-dependent spaces.

Preliminary meeting: Thursday 24.9., 14.00 via Zoom

Meeting-ID: 981 8072 2858

Passwort: 341935