

2016-17 Warwick EPSRC Symposium

Geometric PDEs

12-16 December 2016

Organisers: P. Topping (Warwick), A. Neves (Imperial), N. Wickramasekera (Cambridge),
M. Dafermos (Cambridge), C. Warnick (Imperial)

PROGRAMME

All lectures will take place in Room MS.03, Zeeman Building

Monday 12th

- 10:15-11:00 Coffee in the Mathematics Common Room, and registration in Room B1.37
- 11:00-11:50 **Guido De Philippis** (SISSA) *Allard's rectifiability theorem for anisotropic energies*
- 12:00-14:00 Lunch in the Mathematics Common Room
- 14:00-14:50 **Andrea Mondino** (Warwick) *Isoperimetric inequalities in non-smooth spaces with Ricci curvature bounded below*
- 14:50-15:30 Coffee in the Mathematics Common Room
- 15:30-16:20 **Grigorios Fournodavlos** (Cambridge) *Dynamics of the Einstein equations near a Schwarzschild singularity*
- 16:30-17:20 **Dejan Gajic** (Imperial) *Late-time tails for the wave equation on stationary, asymptotically flat spacetimes*
- 17:30 Wine and dinner in the Mathematics Common Room

Tuesday 13th

- 09:00-09:50 **Felix Schulze** (UCL) *Ricci flow from spaces with isolated conical singularities*
- 10:00-10:50 **Ben Sharp** (Warwick) *Minimal hypersurfaces with bounded index*
- 10:50-11:30 Coffee in the Mathematics Common Room
- 11:30-12:20 **Pieter Blue** (Edinburgh) *Hidden symmetries and decay of fields outside black holes*
- 12:20-14:00 Lunch in the Mathematics Common Room
- 14:00-14:50 **Gustav Holzegel** (Imperial) *Linear stability of the Schwarzschild Solution*
- 14:50-15:30 Coffee in the Mathematics Common Room
- 15:30-16:20 **Lucas Ambrozio** (Imperial) *Some new results for free boundary minimal hypersurfaces*
- 16:30-17:20 **Paul Bryan** (Warwick) *Harnack inequalities and ancient solutions of hypersurface flows*

Continued over

PROGRAMME continued

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Wednesday 14th

- 09:00-09:50 **Daniele Valtorta** (Uni Zuerich) *Sharp estimates for the singular sets of harmonic maps*
- 10:00-10:50 **Alessandro Carlotto** (ETH Zuerich) *Min-max embedded geodesic lines and a question of Bangert*
- 10:50-11:30 Coffee in the Mathematics Common Room
- 11:30-12:20 **Filip Rindler** (Warwick) *Rademacher's theorem, Cheeger's conjecture and PDEs for measures*
- 12:20-14:00 Lunch in the Mathematics Common Room
- 14:00-19:00 Free afternoon
- 19:00 Workshop dinner at Queen & Castle, Kenilworth (minibuses leave at 18:30)

Thursday 15th

- 09:00-09:50 **Filippo Cagnetti** (Sussex) *The rigidity problem for symmetrization inequalities*
- 10:00-10:50 **Arick Shao** (QMUL) *Uniqueness theorems on asymptotically anti-de Sitter spacetimes*
- 10:50-11:30 Coffee in the Mathematics Common Room
- 11:30-12:20 **Reto Buzano** (QMUL) *The moduli space of (2-convex) embedded spheres*
- 12:20-14:00 Lunch in the Mathematics Common Room
- 14:00-14:50 **Giuseppe Tinaglia** (KCL) *The geometry of constant mean curvature surfaces in Euclidean space*
- 14:50-15:30 Coffee in the Mathematics Common Room
- 15:30-16:20 **Wenshuai Jiang** (Warwick) *Regularity and compactness of harmonic-Einstein equations*
- 16:30-17:20 **Rafael Montezuma** (Imperial) *Metrics of positive scalar curvature and unbounded min-max widths*

Friday 16th

- 09:00-09:50 **Costante Belletini** (UCL) *Stable CMC varifolds of codimension 1*
- 10:00-10:50 **Luc Nguyen** (Oxford) *Lipschitz regularity for nonlinear degenerate elliptic equations arising in conformal geometry*
- 10:50-11:30 Coffee in the Mathematics Common Room
- 11:30-12:20 **Melanie Rupflin** (Oxford) *Fine properties of degenerating hyperbolic surfaces and applications*
- 12:20-14:00 Lunch in the Mathematics Common Room
- 14:00 Workshop close