International Research Training Group 1529
Mathematical Fluid Dynamics

IRTG 1529 Research Seminar
Proof Mining and Nonlinear Analysis
TU Darmstadt, February 26 – 28, 2014
Location: S215/234

Speakers:

David Ariza Ruíz (Seville):
Rates of asymptotic regularity for firmly nonexpansive mappings

Miroslav Bacak (Leipzig):
The asymptotic behavior of a semigroup on generated by a nonexpansive map

Jesus García Falset (Valencia):
Existence and uniqueness result to Rotenberg’s model for growing cell population

Daniel Günzel (Darmstadt):
Connecting ultrapowers of metric structures and proof mining

Ulrich Kohlenbach (Darmstadt):
Proof mining: a survey

Daniel Körnlein (Darmstadt):
Rates of metastability for iterations of accretive and nonexpansive mappings

Angeliki Koutsoukou-Argyraki (Darmstadt):
Proof mining for Cauchy problems generated by accretive operators

Laurentiu Leuştean (Bucharest):
Effective methods in geodesic spaces

Genaro López Acedo (Seville):
Algorithms in convex minimization problems

Adriana Nicolae (Bucharest):
Asymptotic behavior of averaged and firmly nonexpansive mappings in geodesic spaces

For further information please visit:
www.mathematik.tu-darmstadt.de/~igk/events.php
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Program of IRTG 1529 Research Workshop
(http://www.mathematik.tu-darmstadt.de/~igk/events.php)
Proof Mining and Nonlinear Analysis
Department of Mathematics, TU Darmstadt, S215/234
February 26-28, 2014

Wednesday, February 26
Morning Session

9.00 - 10.00 Welcome and Informal Discussion: G. Lopez-Acedo, U. Kohlenbach
10.00 - 11.00 U. Kohlenbach: Proof Mining: A Survey and Discussion
11.00 - 11.30 Informal Discussion and Coffee Break
11.30 - 12.30 L. Leustean: Effective Methods in Geodesic Spaces

LUNCH

Afternoon Session

14.30 - 15.30 A. Nicolae: Asymptotic Behavior of Averaged and Firmly Nonexpansive Mappings in Geodesic Spaces
15.30 - 16.00 Informal Discussion and Coffee Break
16.00 - 17.00 D. Ariza-Ruiz: Rates of Asymptotic Regularity for Firmly Nonexpansive Mappings

Thursday, February 27
Morning Session

10.00 - 11.00 J. Garcia-Falset: Existence and Uniqueness Result to Rotenberg’s Model for Growing Cell Population
11.00 - 11.30 Informal Discussion and Coffee Break
11.30 - 12.15 A. Koutsoukou-Argyraki: Proof Mining for Cauchy Problems generated by Accretive Operators

LUNCH

Afternoon Session

14.15 - 15.15 M. Bacak: The Asymptotic Behavior of a Semigroup generated by a Nonexpansive Map
15.15 - ? Informal Discussion
Friday, February 28

Morning Session

10.00 - 11.00 G. López-Acedo: Algorithms in Convex Minimization Problems
11.00 - 11.30 Informal Discussion and Coffee Break
11.30 - 12.15 D. Körnlein: Rates of Metastability for Iterations of Accretive and Nonexpansive Mappings

LUNCH

Afternoon Session

14.15 - 15.00 Daniel Günzel: Connecting Ultrapowers of Metric Structures and Proof Mining
15.00 - 15.30 Informal Discussion and Coffee Break
15.30 - 16.15 E. Neumann: Computational Problems in Metric Fixed Point Theory and Their Weihrauch Degrees
16.15 - ? Open Problems