



MEIJI UNIVERSITY
Ikuta Campus

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SPECIAL LECTURES

ON APPLIED MATHEMATICS

Curvature Effects, Spatial SEIR Models with Applications to Traffic Flow, and Combustion Phenomena

CURVATURE

MATHEMATICS DESCRIBING MOVING INTERFACES

RECENT RESEARCH TOPICS OF PROF. KOLÁŘ

Prof. Kolar's main research interest is in free boundary problems. His main topics are simulation dislocation dynamics in material sciences, problems in image segmentation and computational geometry. Recently, he started collaboration with the host professor on the topics of simulation of dynamics of flame/smoldering interface and on the mathematical description of natural phenomena, which can be described by curves moving on surfaces.



Free boundary problems



Dislocation dynamics in materials



Image segmentation



Computational geometry



Flame / smoldering interface dynamics



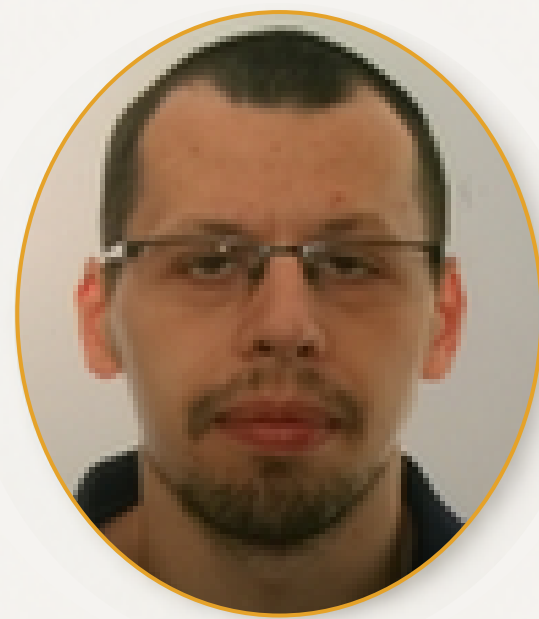
Curves moving on surfaces

SPEAKER

Miroslav Kolář

Assistant Professor, Ph.D.

Mathematical Modelling Group
Faculty of Nuclear Sciences and
Physical Engineering
Czech Technical University in Prague



PLAN OF THREE LECTURES

1st LECTURE

JULY 21st (TUE)

13:30 — 15:10

within B1 lecture for “calculus”
in Department of Mathematics

What is the Curvature?

Bending of Curve: Basics and
Application to Interface Phenomena

Main Building,
3rd floor, 0310

2nd LECTURE

JULY 22nd (WED)

13:30 — 15:10

within B4 seminar of
Yazaki laboratory

Epidemic SEIR Model with Spatial Structure and Traffic Flow

Area 2 Building-D,
2nd floor, D215

3rd LECTURE

JULY 22nd (WED)

15:20 — 16:00

within Workshop on
“Expanding Scope of
Differential Equations”

Application of Curvature Driven Flow on Surfaces

Area 2 Building-6,
7th floor, 6706



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HOST

Prof. Shigetoshi Yazaki
Department of Mathematics
School of Science and Technology
Meiji University



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of Meiji University



WORKSHOP HOMEPAGE

Expanding Scope of
Differential Equations

研究会「微分方程式の拡がり」



Mathematics connects theories and the real world. We look forward to your participation!