

Twenty Years of Biomedical Imaging and Splines

A joint celebration of the twentieth anniversary of the Biomedical Imaging Group
and of the sixtieth anniversary of its head, Prof. Michael Unser.

Michael Unser
Stéphane Mallat
Christophe Rabut
Akram Aldroubi
Thierry Blu

EPFL Room CE6
Friday March 23, 2018, 13:45

Twenty Years of Biomedical Imaging and Splines

March 23, 2018, École polytechnique fédérale de Lausanne, Switzerland

Université de Lausanne, **Amphimax Room 414** (08:30-12:40)

08:00-08:30 Coffee and Croissants

08:30-08:40 Prof. **Michael Unser**, École polytechnique fédérale de Lausanne
Twenty Years of Biomedical Imaging and Splines—Part I: An Introduction; Or How I Taught Over Two Dozen PhDs to Make Long Titles (with Punctuation Aplenty [Even When Titles Ought to Have None {That Is, No Punctuation at All!}])

08:40-09:00 Dr. **Julien Fageot**, École polytechnique fédérale de Lausanne
A Mathematical Journey with the Biomedical Imaging Group

09:00-09:20 Prof. **Brigitte Forster**, Universität Passau
The Commutative Diagram of Signal Processing

09:20-09:40 Prof. **Chandra Sekhar Seelamantula**, Indian Institute of Science, Bangalore
The BIG Bang

09:40-10:00 Prof. **Arash Amini**, Sharif University of Technology
A List Too BIG to Estimate? Sparsity Helps!

10:00-10:20 Prof. **John Paul Ward**, North Carolina Agricultural and Technical State University
Localized Basis Functions on Graphs and Applications

10:20-10:40 Pause

10:40-10:50 Prof. **Jan Kybic**, Czech Technical University
Registration Forever

10:50-11:00 Prof. **Arrate Muñoz**, University Carlos III of Madrid
On Gathering Biomedical Imaging Scientists Together

11:00-11:10 Prof. **Matthews Jacob**, University of Iowa
Parametric Modeling of Curves and Surfaces

11:10-11:20 Prof. **Michael Liebling**, IDIAP Research Institute
Microscopy, in a Heartbeat

11:20-11:30 Prof. **Muthuvel Arigovindan**, Indian Institute of Science, Bangalore
My Experience in Biomedical Imaging Group

11:30-11:40 Prof. **Ulugbek Kamilov**, Washington University in St. Louis
BIG Learning from the Perspective of a Recent Student

11:40-12:40 Many **PhD Alumni**
The BIG Family

12:40-13:45 Dinner and Change of Room

EPFL, **Room CE6** (13:45-18:10)

13:45-14:00 Prof. **Michael Unser**, École polytechnique fédérale de Lausanne
Twenty Years of Biomedical Imaging and Splines

14:00-14:45 Prof. **Stéphane Mallat**, École Polytechnique
Unsupervised Learning and Generative Networks

14:45-15:15 Prof. **Christophe Rabut**, Toulouse University
High-Level B-Splines and Positive-Definite Partition of Unity

15:15-15:30 Pause

15:30-16:15 Prof. **Akram Aldroubi**, Vanderbilt University
On Splines and Other Important Things in Life

16:15-16:45 Prof. **Thierry Blu**, Chinese University of Hong Kong
Local All-Pass Image Registration

16:45-17:00 Pause

17:00-17:20 Dr. **Erik Meijering**, Erasmus University Medical Center
Models in Biomedical Image Analysis

17:20-17:40 Prof. **Costanza Conti**, University of Florence
A Subdivision Approach to Splines and Exponential Splines

17:40-18:00 Prof. **Dimitri Van De Ville**, École polytechnique fédérale de Lausanne
Spline Mines: Digging Deeper Than Any Human Ever Dug

18:00-18:10 Prof. **Martin Vetterli**, École polytechnique fédérale de Lausanne
Concluding Remarks

18:10-18:20 Dr. **D. Sage** & Dr. **P. Thévenaz**, École polytechnique fédérale de Lausanne
Logistics for the Banquet and for Chamonix