

THE SWISS DOCTORAL PROGRAM IN MATHEMATICS INVITES YOU TO THE

## Journée Georges de Rham 2010

Wednesday March 10, 2010 at EPFL auditorium ELA1



The Journée Georges de Rham is a yearly colloquium sponsored by the Swiss Doctoral Program in Mathematics (previously known as the IIIe Cycle Romand de Mathématiques). The list of previous speakers can be found [here](#).

Georges de Rham (1903-1990) was a famous Swiss mathematician. He was professor at the Universities of Lausanne and Geneva. He was also the first president of the Troisième cycle romand de mathématiques and, last but not least, he was an accomplished mountain climber.

The Journée Georges de Rham traditionally consists of two talks of general interest to the mathematical community and given by renowned mathematicians. Georges de Rham passed away 20 years ago and we decided to include in this year's program a short lecture on the de Rham era.

### Program (march 10, 2010)

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| 15:15 - 15:45 | Srishti D. Chatterji (EPFL)   |
|               | <i>A glimpse of the de Rham era.</i>  |
| 16:00 - 17:00 | Luigi Ambrosio  |
|               | <i>Surface measures in Euclidean spaces, Carnot groups and Wiener space.</i>  |
|               | Abstract. In the talk I will make a survey on the theory of surface measures and the related Gauss-Green formulae in a variety of contexts. In the first part of the talk, less technical, I will illustrate the origins of the theory, with the pioneering work of R. Caccioppoli and E. De Giorgi. Then, I will move to more recent developments and open problems, in metric spaces (particularly Carnot groups) and infinite-dimensional Gaussian spaces.   |
| 17:00 - 17:30 | <i>Coffe break</i>  |
| 17:30 - 18:30 | Alexander Bobenko   |
|               | <i>Discrete Differential Geometry: Theory and Applications</i>  |
|               | Abstract: Discrete differential geometry aims at the development of discrete equivalents of the geometric notions and methods of differential geometry. The latter appears then as a limit of refinements of the discretization. Current progress in this field is to a large extent stimulated by its relevance for applications. Concrete examples considered in the talk include discrete curvature line parametrizations, discrete Willmore energy, and applications to architecture and computer graphics. |
| from 19:30 on | Repas au restaurant Minuit Soleil (23 rue Centrale). Si vous êtes intéressés à participer au repas, merci de vous inscrire auprès de Mme Cardoso (maria.cardoso@epfl.ch) en notant comme sujet de votre mail "Repas de Rham".   |