Special week:
Berkovich spaces and applications

June 20–27 2014
IRMA, Strasbourg

The aim of the special weeks of the IRMA is to present a current research topic to students who are finishing their master degrees as well as to more advanced students (Ph.D. students or young post-docs).

This year, we selected the topic of p-adic analytic geometry in the sense of Berkovich, with emphasis on the applications.

`http://www-irma.u-strasbg.fr/article1433.html`
`http://www-irma.u-strasbg.fr/article1435.html`

During the week, there will be 3 courses complemented by sessions of questions and answers. These courses will be videotaped and available online afterwards:

`http://canalc2.u-strasbg.fr/video.asp?idvideo=12799`

Beforehand, there will be 3 precourses (on 2 days) to introduce the general notions that will be used during the week.

At the end of the week, there will be a general audience talk as well as more specialized research talks.

We cover the costs of accomodation and lunch. For master students, we also cover the travel costs.

Organization: C. Perin, J. Poineau

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IRMA Institut de Recherche Mathématique Avancée

UNIVERSITÉ DE STRASBOURG

PROJET FINANCÉ PAR L'ANR – PROJECT FUNDED BY THE ANR — ANR

Precourses:

PC 1: *Berkovich spaces* (F. Martin, Lille)
PC 2: *The étale fundamental group of algebraic varieties* (C. Gasbarri, Strasbourg)
PC 3: *Zariski-Riemann spaces* (J. Poineau, Strasbourg)

	06/20	**06/21**
9:00 – 10:30		PC 3
11:00 – 12:30		PC 1
14:00 – 15:30	PC 1	PC 2
16:00 – 17:30	PC 2	PC 3

Courses:

C 1: *Fundamental groups in p-adic geometry* (E. Lepage, Paris)
C 2: *Applications of Berkovich spaces to the arithmetic of toric varieties* (J. Burgos, Madrid)
C 3: *Skeleta of Berkovich spaces and birational geometry* (J. Nicaise, Leuven)
GAT: General audience talk: *Geometry in the non-archimedean world* (A. Werner, Francfort)
Q&A: Questions and answers session

	06/23	**06/24**		**06/25**		**06/26**
9:00 – 10:30	C 1	C 2	9:00 – 10:30	C 3	9:00 – 10:30	C 1
11:10 – 12:40	C 2	C 3	11:10 – 12:40	C 2	11:10 – 12:40	C 2
14:00 – 15:30	C 3	C 1	14:00 – 15:00	Q&A	14:00 – 15:00	Q&A
16:00 – 17:00	Q&A	Q&A			16:00 – 17:00	GAT

The recordings of the courses are available here:

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Research talks:

T 1: *Strict supports of canonical measures and applications to the geometric Bogomolov conjecture* (K. Yamaki, Kyoto)
T 2: *p-adic differential equations over Berkovich curves* (F. Martin, Lille)
T 3: *A topological tameness result for Berkovich spaces* (A. Pulita, Montpellier)

	06/27
9:00 – 10:30	T 1
11:10 – 12:40	T 2
14:00 – 15:30	T 3

List of participants

Ancona Giuseppe (Essen)
Azzouz Tinhinane Amina (Paris)
Bana Ayoub (Strasbourg)
Beliaeva Tatiana (Strasbourg)
Burgos José (Madrid)
Cámara Alberto (Besançon)
Carayol Henri (Strasbourg)
Cubides Kovacsics Pablo (Lille)
Dogan Ugur (Berlin)
Emerson Kathleen (Princeton)
Fischer Konrad (Heidelberg)
Gasbarri Carlo (Strasbourg)
Guichard Olivier (Strasbourg)
Häberli Simon (Zurich)
Herblot Mathilde (Paris)
Hertel Julius (Regensburg)
Huyghe Christine (Strasbourg)
Jell Philipp (Regensburg)
Kawaguchi Shu (Kyoto)
Kurul Şevda (Francfort)
Lecomte Florence (Strasbourg)
Lehn Christian (Paris)
Lepage Emmanuel (Paris)
Maculan Marco (Paris)
Marmora Adriano (Strasbourg)
Martin Florent (Lille)
Martin Jean-Franois (Paris)
Narvez Clauss Marta (Barcelone)
Nicaise Johannes (Leuven)
Noot Rutger (Strasbourg)
Pacienza Gianluca (Strasbourg)
Poineau Jérôme (Strasbourg)
Pulita Andrea (Montpellier)
Scarponi Danny (Toulouse)
Schadeck Laurent (Orsay)
Sigloch Helene (Freiburg)
Souaifi Sofiane (Strasbourg)
Soto Alejandro (Francfort)
Sustretov Dmitry (Jerusalem)
Vollmer Philipp (Regensburg)
Wintenberger Jean-Pierre (Strasbourg)
Wittmann Malaika (Francfort)
Xie Songyan (Orsay)
Yamaki Kazuhiko (Tokyo)