

**ALGEBRAIZATION THEOREMS: FROM GAGA TO FOLIATIONS
OVER NUMBER FIELDS**

TATIHOUS ISLAND, 4-8 JULY 2016

Monday.

- 9:00 Welcome + Introduction
- 9:45 Talk 1
Algebraization in complex analytic geometry I. From Puiseux to Chow.
Yohan Brunebarbe
- 10:45 Coffee break
- 11:15 Talk 2
Algebraization in complex analytic geometry I. Géométrie Algébrique et
Géométrie Analytique.
Michele Ancona
- 12:15 Lunch break
- 14:15 Talk 3
The formalism of slopes. Vector bundles on projective curves.
Diego Izquierdo
- 15:15 Coffee break
- 15:45 Talk 4
The Hodge Index Theorem on projective surfaces. Connectivity theorems.
Frank Gounelas
- 16:45 Break (no coffee)
- 17:15 Talk 5
An introduction to formal geometry.
Nicola Mazzari

Tuesday.

- 9:30 Talk 6
The theorems of Andreotti and Hartshorne.
Florent Martin
- 10:30 Coffee break
- 11:00 Talk 7
The theorems of Grauert and Grothendieck (SGA2).
Olivier Benoist
- 12:15 Lunch break
- 14:30 Talk 8
Algebraic foliations.
Arne Smeets
- 15:45 Coffee break
- 16:15 Talk 9
Some geometric applications.
Simon Pepin Lehalleur

Wednesday.

9:30 Talk 10

First steps in Arakelov geometry.

Ramla Abdellatif

10:30 Coffee break

11:00 Talk 11

Arakelov geometry on arithmetic surfaces.

Ariyan Javanpeykar

12:15 Lunch break

Free afternoon (there will be coffee at some point)

19:00 Additional talk

Theta series, infinite rank Euclidean lattices, and Diophantine algebraization

Jean-Benoît Bost

Thursday.

9:30 Talk 12

Schwarz Lemma.

Robert Kucharczyk

10:30 Coffee break

11:00 Talk 13

Arithmetic algebraization à la Chudnovsky I. Statements and proofs.

Peter Jossen

12:15 Lunch break

14:30 Talk 14

Arithmetic algebraization à la Chudnovsky II. Diophantine applications.

Ziyang Gao

15:45 Coffee break

16:15 Talk 15

Arithmetic algebraization à la Schneider-Lang I. Statements and proofs.

Lars Kühne

Friday.

9:00 Talk 16

Arithmetic algebraization à la Schneider-Lang II. Diophantine applications.

François Charles

10:15 Coffee break

10:30 Additional talk

Cycles in the de Rham cohomology of abelian varieties over number fields.

Yunqing Tang