

# Arithmetic and Algebraic Differentiation:

Witt vectors, number theory and differential algebra  
In honor of Alexandru Buium

Berkeley, 6 May 2015 - 10 May 2015

This meeting will focus on the theory of arithmetic differentiation in the guise of  $p$ -differential operators and connections of this theory to Witt vectors, problems in diophantine geometry, difference and differential algebra, and related topics. We expect to have many perspectives represented and welcome diverse takes on the subject.

We are holding this meeting to honor Alexandru Buium on the occasion of his 60th birthday. His influence has been felt throughout mathematics, especially in the topics presented here.

## Registration

If you plan to attend this conference, please write to the organizers at [Arithmetic.Differentiation@gmail.com](mailto:Arithmetic.Differentiation@gmail.com). Most of our funding has been allocated already, but if you need support to attend, it would not hurt for you to ask now.

## Schedule

On Wednesday, Thursday and Friday, the lectures and coffee breaks will be held in 1015 Evans. On Saturday and Sunday, the lectures will be in 740 Evans while the coffee breaks will be in the Tarski Room, 727 Evans.

The conference will open with a short introduction at 11am on Wednesday in 1015 Evans.

	<b>Wednesday in 1015</b>	<b>Thursday in 1015</b>	<b>Friday in 1015</b>	<b>Saturday in 740</b>	<b>Sunday in 740</b>
9:30am - 10:20am		Lars Hesselholt	Zoé Chatzidakis	Bhargav Bhatt	Anand Pillay
10:30am - 11:20am		Damien Röessler	Andre Chatzistamatiou	Andrei Minchenko	Jean-Benoît Bost
11:30am - 12:20pm	Felipe Voloch	Teena Gerhardt	James Freitag	Hossein Movasati	
2:30pm - 3:20pm	Kirsten Wickelgren	Alexei Ovchinnikov	Silvain Rideau	Dinesh Thakur	
3:30pm - 4:20pm	Rahim Moosa	Arnab Saha	Jöel Merker	Alexandru Buium	

[Abstracts](#) are posted as they become available.

## Local Information

Most speakers will be staying at the [Faculty Club](#) or the [Women's Faculty Club](#). A [map](#) of Berkeley together with a list of some nearby restaurants is available.

## Conference banquet

A conference banquet will be held at the Faculty Club on Friday evening. Please [register](#) before the conference begins. We are required to submit our final list of attendees by Wednesday.

## Organizing committee:

- James Borger, Australian National University
- Taylor Dupuy, Hebrew University
- Kiran Kedlaya, University of California, San Diego
- Thomas Scanlon, University of California, Berkeley

This conference is supported by the UC Berkeley Mathematics Department and the National Science Foundation.