Our Team

Andrew Macpherson   Research Field: Mathematics

Postdoc

   My research applies categorical and algebro-geometric thinking to other areas of geometry, especially those that pertain to mirror symmetry. For example:

- Derived geometry as an extension of smooth geometry in various contexts; with application to enumerative questions and Floer theory,
- Non-Archimedean geometry as formal geometry "up to birational modifications," after M. Raynaud,

and

- Polyhedral and tropical geometry as the algebraic geometry dual to max-plus semirings, and its connections to the preceding.

Tea Break:
Hey, tell me what you do in research!

   How often are you asked by your friends who are not physicists or mathematicians to describe what you do in your research? If you were looking for a short answer, here are a couple of options. A colleague of mine at the University of Minnesota, the Algebraic Topologist Hillel Gershenson, passed away last August. He was a remarkable fellow with a wonderful sense of humor. He always described what he was doing to curious non-mathematical friends as "most inapplicable mathematics." Once someone asked him at a party what his field of study was, and he said "Algebraic Topology." His friend misheard him as saying "Algebraic Apology" and responded: "Oh, I have been waiting for such a long time for someone to apologize for Algebra!"

(Contributed by Alexander A. Voronov)