

Ben Singer '27

The Australian Direction

Summer 2026

This summer, I used Byrne scholarship funding to attend The Australian Direction, an ICM satellite conference on p -adic Hodge theory and the arithmetic Langlands program held in honor of Mark Kisin and Matt Emerton. At the conference, I had the opportunity to see many of the biggest names in these fields speak on cutting-edge research; the highlights for me were talks from Toby Gee and Ana Caraiani on local-global Langlands compatibility and the intersection cohomology of Shimura varieties, respectively. I also had the opportunity to speak with many amazing graduate students, postdocs, and professors, who all taught me a great deal of math as well as gave some very helpful advice regarding graduate school applications and starting research in this area.

Attending this conference further confirmed my desire to pursue this research direction in graduate school. It also gave me many more directions to think about regarding my upcoming senior thesis on p -adic Hodge theory. I would like to thank the Byrne Scholars Program for funding my travel, housing, and meals. It was an amazing experience!