George R. Kempf Lecture Series

Presents

Interpolating p-adic cohomology Theories

Thursday, April 4, 2019

4:00-5:00PM

Latrobe 120

Integration of differential forms against cycles on a complex manifold helps relate de Rham cohomology to singular cohomology, which forms the beginning of Hodge theory. The analogous story for p-adic manifolds, which is the subject of p-adic Hodge theory, is richer due to a wider variety of available cohomology theories (de Rham, etale, crystalline, and more) and torsion phenomena. In this talk, I will give a bird's eye view of this picture, guided by the recently discovered notion of prismatic cohomology (which was inspired by calculations in homotopy theory) that provides some cohesion to the story. Based on joint works with Morrow and Scholze.



Bhargav Bhatt Department of Mathematics University of Michigan

Additional Talk The Direct Summand Conjecture Friday, April 5, 2019 3:00 - 4:00 PM Krieger 304

Wine & Cheese Krieger 413 3:00-4:00 PM



Support for the George R. Kempf Lecture Series is provided by the Kempf Memorial Endowment and the Department of Mathematics

> For more information on the series visit our website at: http://mathematics.jhu.edu/events/kempf-lectures/