



## Mathematics and CS Seminar

# p-adic non-abelian Hodge theory for non-p-adic geometers

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Host: Tamas Hausel

I will give an introduction to recent advances in p-adic non-abelian Hodge theory aimed at complex geometers. Assuming no technical background in p-adic geometry, the first goal of this talk is to explain a reinterpretation of Faltings' p-adic Simpson correspondence in the language of Scholze's perfectoid geometry. The focus will be on explaining analogies to the complex non-abelian Hodge correspondence. I will then explain how moduli spaces can be used to give a geometric incarnation of the p-adic Simpson correspondence: Surprisingly, and in contrast to the complex situation, the p-adic Hitchin fibration on the Betti side turns out to be an analytic fibration.

**Thursday, May 4, 2023 01:00pm - 03:00pm**

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



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