

NEWTON DECOMPOSITION OF LOOP GROUP AND AFFINE CHARACTER SHEAVES

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Time: Friday, December 12th; 16:00-17:00

Venue: Room 102, SCMS

Abstract:

In this talk I will explain how one can decompose the loop group associated to a connected reductive group G into parts known as Newton strata. These remarkable strata are invariant under the conjugation of LG and by passing to Levi subgroups one can reduce questions on an arbitrary stratum to questions on basic strata, which are more manageable. I will then explain how one can use these strata to define and study a very sought-after category of character sheaves for loop groups (e.g. p -adic groups or Kac—Moody groups). This is based in joint ongoing work with Xuhua He and Xinwen Zhu.