



## Mathematics and CS Seminar

# Character varieties of non-orientable surfaces

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Host: Tamas Hausel

We will discuss various types of character varieties parametrizing representations of the fundamental group of a punctured non-orientable surface. We compute the number of points of these spaces over finite fields from which we get a formula for their E-series (a certain specialization of the mixed Poincare series). For one type of character variety we extend this calculation to a conjectural formula for the full mixed Poincare series in terms of Macdonald symmetric functions and we provide some evidence. Unexpectedly, the formulas we obtain turn out to be closely related to those arising from the character varieties of punctured compact orientable Riemann surfaces. This is joint work with E. Letellier.

**Thursday, October 22, 2020 02:00pm - 03:00pm**

<https://mathseminars.org/seminar/AGNTISTA>



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.