Distinguished series of lectures

- Name: Eric Urban (Columbia University, New York, US)
- Title :On the Bloch-Kato conjecture for automorphic polarized motives.
- Abstract:
  Abstract: The goal of these lectures is to present a proof towards some results predicted by the Bloch-Kato conjecture giving a link between the order of vanishing of the L-function of a motive and the rank of the corresponding Bloch-Kato-Selmer group. The first lecture will be a review of the general conjecture and its link to the Birch and Swinnerton-Dyer conjecture. The next lectures will be devoted to a review of the tools the are needed for the proof, namely the theory of Eisenstein series, Eigenvarieties and some p-adic Hodge theory. Some very simple case of the strategy will be studied before the last lectures that will be devoted to the proof of the following result. Let M be an automorphic polarized motive over an imaginary quadratic field such that its L-function vanishes at the center of the functional equation, then the Bloch-Kato-Selmer group of M is of rank at least one.
- Date and place The venue will be at UB's historical building at Placa Universitat. On February 4, 11, 18 and 25 at 10:30 at Room T1.

The project leading to this application has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 682152).