NUMBER THEORY SEMINAR
Monday, Nov. 3, 4.30 - 5.30 pm, MS 6221

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Title: Zeta functions of twisted quaternionic Shimura varieties.

Abstract: The zeta function for Hilbert Shimura varieties was computed by Brylinski and Labesse. Reimann generalized the result to quaternionic Shimura varieties. In my talk I will twist the quaternionic Shimura variety associated to the principal congruence subgroup $\Gamma(n)$ by the natural action of $GL_2(\mathcal{O}/n\mathcal{O})$ (here $\mathcal{O}$ is the ring of integers of the totally real field F that corresponds to the Shimura variety and n is an ideal of $\mathcal{O}$) on the endomorphism group of the variety. I get a new variety called "twisted quaternionic Shimura variety". I will compute the zeta function of this variety and then I will prove the functional equation and the meromorphic continuation of the zeta function to the whole complex plane when the dimension of this variety is 1 or 2.