

UBC Number Theory Seminar: February 16, 2022

Speaker: Isabella Negrini (McGill University)

Title: A Shimura-Shintani correspondence for rigid analytic cocycles

Abstract: In their paper Singular moduli for real quadratic fields: a rigid analytic approach, Darmon and Vonk introduced rigid meromorphic cocycles, i.e. elements of $H^1(SL_2(\mathbb{Z}[1/p]), M^\times)$ where M^\times is the multiplicative group of rigid meromorphic functions on the p-adic upper-half plane. Their values at RM points belong to narrow ring class fields of real quadratic fields and behave analogously to CM values of modular functions on $SL_2(\mathbb{Z}) \backslash H$. In this talk I will present some progress towards developing a Shimura-Shintani correspondence in this setting.