Critical values of Hecke L-functions

Han-Ung Kufner (Universität Regensburg)

A conjecture of Deligne from 1977 relates the critical values of a motivic L-function with certain periods of the motive. The goal of this talk is to explain Deligne's conjecture and to discuss a proof in the case of Hecke L-functions. This generalizes a result of Blasius for Hecke characters of CM-fields. For the proof we use the recently constructed Eisenstein-Kronecker classes of Kings-Sprang and combine them with ideas from Blasius' proof.