

Euler's constant and exponential motives

Monday, 3 June 2024 14:30 (1 hour)

In the category of exponential motives over \mathbb{Q} there is a new extension of $\mathbb{Q}(-1)$ by $\mathbb{Q}(0)$ which does not come from classical motives. Its period matrix features Euler's constant, which one is tempted to think of as the regularised value of Riemann's zeta function at 1. I will discuss several results and open questions revolving around this extension, for example the role it plays as a "monodromy factor" for differential equations of E-functions. The talk is based on joint work with Peter Jossen.

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