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Jonathan A Campbell* (jonalfcam@gmail.com). *The Cyclotomic Trace and the Characteristic Polynomial.*

The cyclotomic trace is a powerful tool for computations in algebraic K-theory, and associated invariants have recently been used in number theory. However, the trace map is notoriously difficult to understand concretely. In this talk I'll describe work that relates the trace map to much more familiar invariants: zeta functions and the characteristic polynomial. The key input is a bicategorical view of the trace, and allows for tractable computations. This viewpoint simultaneously makes the trace more hands-on and more powerful.

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