

# Conjectures on exponential sums and on numerical data related to Igusa's program on Poisson summation

**Abstract:** In joint work with Kien Huu Nguyen, we relate questions in the spirit of Igusa's question on finite exponential sums to relations among numerical data associated with Hironaka's embedded resolutions. We also formulate local variants, both for exponential sums and for the numerical data. The use that Igusa had in mind was to deal with adelic integrability issues to generalize Siegel-Weil type Poisson summation formulae.