

Da Nang Ideas

February 22, 2019 2:54 PM

Acronym. DPeGDO.

Title. All about sl_2^ϵ is D-PeGDO. So what?

Abstract. I'll explain what "all about" means ($cm, qm, c\Delta, q\Delta, cS, qS, R, C, P, tr, \Phi, J, Deq, \theta$, and more, and all of their compositions), what D-PeGDO means (the category of Docile Perturbed Gaussian Differential Operators), and what sl_2^ϵ means (a solvable approximation of the semi-simple Lie algebra sl_2). Knot theorists should care because all this leads to very powerful and well-behaved poly-time-computable knot invariants. Quantum algebraists should care because it's a realistic playground for testing complicated equations and theories.