

Mina Aganagic: Instant counting, W-algebras and the little string

I will describe the relation between K-theoretic instanton counting for ADE type quiver gauge theories and q,t -deformed W-algebras of ADE type. I will also explain the origin of the correspondence from physics perspective: both describe a 6d string theory ("the little string" $\hat{=}$) compactified on a Riemann surface. $\hat{=}$ The little string contains the theory X, the mysterious 6d QFT that has become omnipresent in mathematical physics. The bigger theory can be easier to understand, as this example shows. $\hat{=}$ (This talk is based on $\hat{=}$ <http://arxiv.org/pdf/1506.04183.pdf>.)