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Mohammed Abouzaid, Sheel Ganatra* (sheel.ganatra@usc.edu), **Hiroshi Iritani** and **Nick Sheridan**. *The Gamma and SYZ conjectures: a tropical approach to periods*.

The Gamma conjectures (in one formulation) posit that the mirror symmetry equivalence between de Rham cohomology of a complex variety and quantum cohomology of its symplectic mirror should identify certain integral lattices. While the algebro-geometric lattice consists of integral homology cycles, the symplectic lattice involves twisting the appropriate lattice of cycles by a transcendental multiplicative characteristic class (the “Gamma class”), built from products of Riemann zeta values and Chern classes. We will review this picture and give an explanation for the simplest case of the Gamma conjectures in terms of the SYZ geometric formulation of mirror symmetry, in which zeta values appear as error terms to the “tropical asymptotics” of period integrals. (Received January 23, 2019)