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The mirror P=W conjecture from Homological Mirror Symmetry

The mirror P=W conjecture, recently formulated by A.Harder, L.Katzarkov and V.Przyjalkowski, is a refined Hodge number symmetry between a log Calabi-Yau mirror pair (U, U^{\vee}) . It predicts that the weight filtration on the cohomology $H^{\bullet}(U)$ is equivalent to the perverse filtration on the cohomology $H^{\bullet}(U^{\vee})$ associated to the affinization map. One can see this phenomenon from the categorical viewpoint when U admits a Fano compactification (X, D) where X is a smooth Fano and D is a smooth anti-canonical divisor. I will go over this story and generalize it to the case when D has more than one component.