Title

Refined geometric transition and qq-characters

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Abstract

We show the refinement of the prescription for the geometric transition in the refined topological string theory and, as its application, discuss a possibility to describe qq-characters from the string theory point of view. Though the suggested way to operate the refined geometric transition has passed through several checks, it is additionally found in this paper that the presence of the preferred direction brings a nontrivial effect. We provide the modified formula involving this point. We then apply our prescription of the refined geometric transition to proposing the stringy description of doubly quantized Seiberg–Witten curves called qq-characters in certain cases.