JAPANESE JOURNAL
OF MATHEMATICS
SINCE 1924

Quantization via mirror symmetry*

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Abstract. When combined with mirror symmetry, the A-model approach to quantization leads to a fairly simple and tractable problem. The most interesting part of the problem then becomes finding the mirror of the coisotropic brane. We illustrate how it can be addressed in a number of interesting examples related to representation theory and gauge theory, in which mirror geometry is naturally associated with the Langlands dual group. Hyperholomorphic sheaves and (B, B, B) branes play an important role in the B-model approach to quantization.

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