

Towards global mirror symmetry

Abstract:

During the last twenty years, mirror symmetry has been a driving force in geometry and physics. Many incredible results have been obtained in mathematics. However, a brief investigation reveals that the current form of mirror symmetry in mathematics is only a "local" form of mirror symmetry concerning so called large complex structure limits. An interesting problem is if we can gain more information by moving away from the large complex structure limit. Namely, is there an interesting theory of "global" mirror symmetry? In this talk, we will cover some of the exciting developments in this direction.