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## Scattering diagram for noncommutative resolutions

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Scattering diagrams techniques allows to compute the BPS invariants of quiver with potential in terms of some initial data, which are expected to be simple in physically sensible examples (eg, they have been determined for class S theory).

We are interested in quiver with potential giving noncommutative resolution of CY3 singularities: in this case, the space of stability conditions of the quiver is divided into chambers, corresponding to different (commutative) resolutions of the singularity, related by Mori transformations. Using techniques from the theory of Bridgeland stability condition, we prove that the initial data of the quiver are supported on the wall between these chambers, hence can be determined from the birational geometry of the resolutions. In particular, this gives a complete description of the initial data for toric quivers.

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