

Optimal martingale transport in general dimensions

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We discuss the optimal solutions to a transport problem where mass has to move under martingale constraint; this constraint forces the transport to split the mass. This problem was originated from mathematical finance, e.g. option pricing. There have been intensive studies on the one-dimensional case, but, rarely in higher dimensions. We present structural results in general dimensions.

This is joint work with Nassif Ghoussoub and Tongseok Lim.

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