## SEMPARIS – Séminaires en région parisienne

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## **TBA**

Lundi 16 Mai 2022, 11 :30 IHES, Amphithéâtre Léon Motchane

Domaines: math-ph

Titre: Cut-and-join Operators in Cohomological Field Theory and Topological Recursion

Orateur : Alexander Alexandrov ( Center for Geometry and Physics, Pohang, Korea )

Résumé: We construct a cubic cut-and-join operator description for the partition functions of all semi-simple cohomological field theories, and, more generally, for the partition functions of the Chekhov-Eynard-Orantin topological recursion on a possibly irregular local spectral curve. The cut-and-join description leads to an algebraic version of topological recursion. For the same partition functions, we also derive N families of the Virasoro constraints and prove that these constraints, supplemented by a deformed dimension constraint, imply the cut-and-join description. The talk is based on arXiv:2202.09090.