

## **Pavel Mnev : “Examples of bulk-boundary correspondences of field theories as BV pushforwards”**

*lundi 3 juillet 2023 14:00 (1 heure)*

I will explain how one can obtain 2d Wess-Zumino-Witten model on a surface as a Batalin-Vilkovisky pushforward (perturbative fiber BV integral, or “quantized” pushforward of dg manifolds) from 3d Chern-Simons theory on the cylinder (surface) $\times$ (interval). Here Chern-Simons is treated in BV formalism with functorial cutting-gluing.

A similar construction applied to abelian Chern-Simons on a 7d cylinder yields the 6d Kodaira-Spencer gravity (a.k.a. BCOV theory). The talk is based on a joint work with Alberto S. Cattaneo and Konstantin Wernli, arXiv:2012.13983 .