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## Hydrodynamisation in holography with dynamical boundary gravity

*vendredi 29 avril 2022 11:45 (25 minutes)*

This talk will start with an introduction to hydrodynamisation in an FRW universe. I first briefly describe the set-up and show how a hydrodynamic plasma dilutes and falls out of equilibrium due to expansion towards empty de Sitter spacetime [1]. Finally, I will show new technical advances that allowed us to dynamically evolve the boundary metric in accordance with the Friedmann equations [2]. Previously unphysical renormalisation constants now become physical parameters and depending on the boundary cosmological constant this leads to de Sitter, asymptotically flat or Big Crunch cosmologies.

[1] Jorge Casalderrey-Solana, Christian Ecker, David Mateos and WS, Strong-coupling dynamics and entanglement in de Sitter space, 2011.08194 (SciPost Phys)

[2] Christian Ecker, WS, David Mateos and Jorge Casalderrey-Solana, Holographic Evolution with Dynamical Boundary Gravity, 2109.10355

### Type of contribution

Contributed Talk only

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