

Flat Space Quantum Gravity



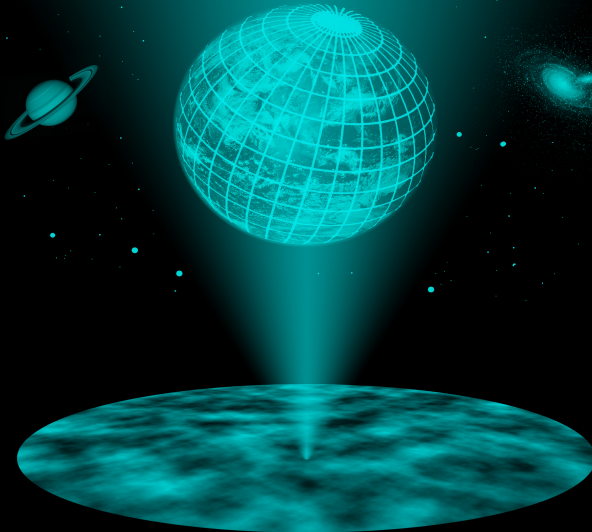
Max Riegler
rieglerm@hep.itp.tuwien.ac.at

Institute for Theoretical Physics
TU Wien

DK-PI Final Event, Sep. 28/29

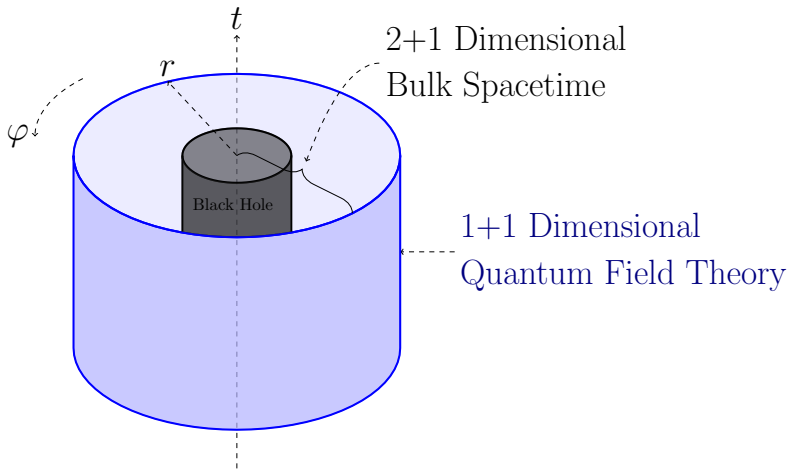
Introduction

The Holographic Principle





(Quantum) gravity $(d+1) \Leftrightarrow$ QFT (d)



Introduction

Realistic Black Holes

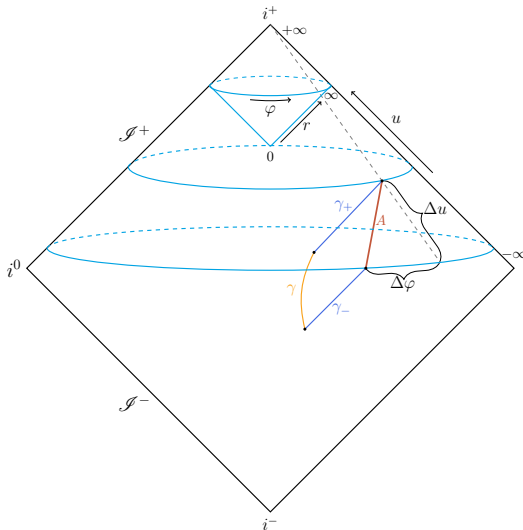


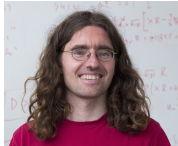
Go beyond AdS/CFT!



Flat Space Holography

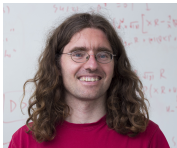
Example: Holographic Entanglement Entropy





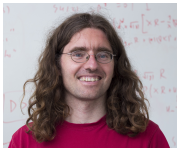
$\int dk \Pi$ Doktoratskolleg
Particles and Interactions

- ▶ Research visit 10/2014 - 02/2015 (Tadashi Takayanagi; Kyoto)



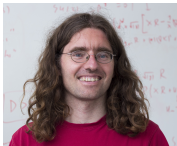
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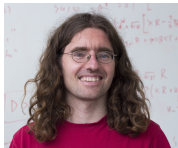
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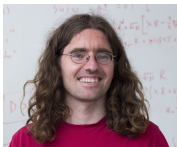
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- ▶ Erwin Schrödinger fellowship (€122k) –declined–



- ▶ Group: Andrew Strominger



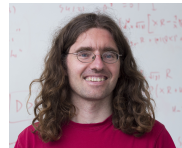
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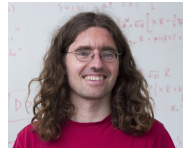
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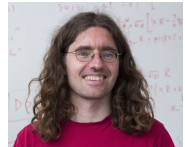
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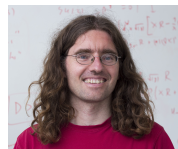
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- ▶ Part of the organizing committee of Strings 2022



- ▶ Role: Senior Quantum Key Distribution Expert



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- ▶ Start: 12/23



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- ▶ Start: 12/23
- ▶ Responsibility: QKD security proofs, consulting

A decorative graphic consisting of multiple overlapping, flowing lines in shades of light blue and white. The lines curve from the top left towards the bottom right, creating a sense of motion and elegance. The background is a soft, light blue gradient.

Thank you for your attention!