2024 CAP Congress / Congrès de l'ACP 2024



Contribution ID: 4504 Type: Oral not-in-competition (Graduate Student) / Orale non-compétitive (Étudiant(e) du 2e ou 3e cycle)

(G) Temporary horizons: the life and times of a quantum black hole

Friday 31 May 2024 09:45 (15 minutes)

I will discuss a class of time-dependent, asymptotically flat and spherically symmetric metrics which model gravitational collapse in quantum gravity developed by myself and the other listed authors. Motivating the work was the intuition that quantum gravity should not exhibit curvature singularities and indeed, the metrics lead to singularity resolution with horizon formation and evaporation following a matter bounce. We also look at how a matter field behaves with this background,

Keyword-1

blackhole

Keyword-2

quantum gravity

Keyword-3

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Track Classification: Technical Sessions / Sessions techniques: Theoretical Physics / Physique théorique

(DTP-DPT)