Canadian Association of Physicists
Association canadienne des physiciens et physiciennes

Contribution ID: **3729** 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

Monday 19 June 2023 16:30 (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. A noteworthy result of this metric is that we can recover the Hawking evaporation time Mˆ3 for the lifetime of the black hole.

Keyword-1

quantum gravity

Keyword-2

black holes

Keyword-3

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Session Classification: (DTP) M3-9 Strong Gravity and Black Holes | Gravité forte et trous noirs (DPT)

Track Classification: Technical Sessions / Sessions techniques: Theoretical Physics / Physique théorique (DTP-DPT)