

GRAVITY DAY IN PARIS

Topic: Recent Advances on Einstein's Constraint Equations

Tuesday, September 15, 2026

Laboratoire Jacques-Louis Lions, Sorbonne University

4, Place Jussieu, 75258 Paris

Lecture room 15-25-309

Programme

9h15	Welcome
9h30–10h15	Arthur Touati (Bordeaux) <i>Spacelike initial data for black hole stability</i>
10h15–10h45	Coffee break
10h45–11h30	Xuantao Chen (LJLL, Sorbonne) <i>Solving the constraint equation for general free data</i>
11h40–12h25	Bruno Le Floch (LPTHE, Sorbonne) <i>Optimal localization for the Einstein constraints</i>
12h30–14h30	Lunch break
14h30–15h15	Zhongkai Tao (IHES) <i>An h-principle for general relativistic initial data sets</i>
15h25–16h10	Romain Gicquaud (Tours) <i>On the topology of vacuum initial data in general relativity</i>
16h10–16h40	Coffee break
16h40–17h25	Jingbo Wan (LJLL, Sorbonne) <i>Flexibility of time-symmetric vacuum initial data</i>
17h30	Closing

Organized by Bruno Le Floch (LPTHE, Sorbonne) and Philippe G. LeFloch (LJLL, Sorbonne)

As an event of the ANR project

Einstein's constraints: past, present, and future

Co-investigators: Erwann Delay (Avignon) and Romain Gicquaud (Tours)

<https://philippelefloch.org>