

# ACA 2027

## Proposal to Host the 32nd Applications of Computer Algebra

Rennes, France

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### Local Organizing Committee:

*G. N. Alfarano, D. Boucher, K. Ghorbal, J. Nardi*  
Univ. Rennes, CNRS, IRMAR

We formally propose to host the **32nd Applications of Computer Algebra (ACA)** conference in **Rennes, Brittany**. As the home of **INRIA** and the **IRMAR** mathematics institute, Rennes combines a rich cultural heritage with a high-density research environment.

## 1 Location and Venue

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Rennes is a prominent European university city, recognized for its dense concentration of research laboratories and its rich cultural history.

- **The Venue:** Hosted at **INRIA (Beaulieu Campus)**, the heart of Breton scientific research. This campus, located at the East of Rennes, brings together around twenty research units accredited by major national research organizations (CNRS, INRA, INRIA, and INSERM).
- **Infrastructure:** We will provide a large auditorium for invited talks, dedicated break-out rooms for special sessions, and high-speed campus-wide connectivity.
- **Mobility:** Well connected to the city center via **Metro Line B** and major bus routes.

## 2 Proposed Dates

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To balance pleasant weather with academic availability, we suggest: **July 5–9, 2027**

## 3 Organizing Committee

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The organizing team brings together researchers from leading scientific institutions in Rennes, ensuring a great interplay of mathematical theory and computational expertise.

- **Gianira N. Alfarano** (Univ. Rennes, IRMAR): Expert in algebraic coding theory, combinatorics and finite geometry.
- **Delphine Boucher** (Univ. Rennes, IRMAR): Expert in computer algebra and its applications to coding theory, especially via skew polynomial methods.
- **Khalil Ghorbal** (INRIA Rennes): Expert in effective algebraic geometry at the intersection of differential and computer algebra. He is the head of the “Calcul Formel” working group in France.
- **Jade Nardi** (CNRS, Univ. Rennes, IRMAR): Expert in algebraic geometry and its applications to information theory, including algebraic coding theory and distributed storage.

*The committee is supported by the **IRMAR** and **INRIA** laboratories, which host a well-known research cluster in Computer Algebra, Coding Theory and Cryptography.*

## 4 Accessibility

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Rennes is highly accessible from major international hubs:

-  **TGV Train:**

- Approx. **1h30** from Paris Montparnasse (city center).
- Approx. **2h30** via direct TGV connections from **Paris CDG Airport**.
- From **Paris Orly Airport**: Take **Metro Line 14** to Châtelet, then switch to **Line 4** to reach Montparnasse (**approx. 40 min** total).
-  **Air**:
  - **Rennes Airport (RNS)** offers daily flights to hubs like Amsterdam and London.
  - **Paris CDG** also offers direct 1h flights to Rennes (though the TGV is usually more convenient).
-  **Local Mobility**: Two automated metro lines link the station to the city center and the venue in under 15 minutes.

## 5 Lodging and Logistics

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- **Accommodation**: A wide range of hotels (approx. **95€– 140€**) in the city center.
- **Registration**: We target a competitive fee of **300€**, including catering and social events.
- **Funding**: We can secure initial budgetary support from the **University of Rennes**, the **Brittany Region**, and **Rennes Métropole**.

## 6 Social Program

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- **Excursion**: A choice between the UNESCO site **Mont Saint-Michel** or the historic coastal city of **Saint-Malo**.
- **Social Dinner**: A celebration of Breton gastronomy (and local cider) in the heart of Rennes or a conference banquet.

## 7 Visual Highlights

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*Historic Rennes City Centre*



*INRIA Research Centre*



*Mont Saint-Michel*



*Saint-Malo Coastal Walls*

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*Join us in Rennes for a productive and culturally rich ACA 2027!*