



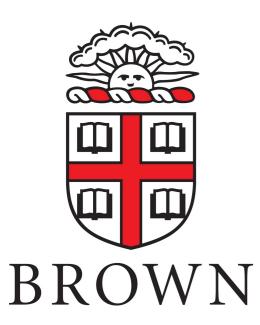
Stephon Alexander<sup>1</sup>, Aram Apyan<sup>2</sup>, <u>Gaetano Barone</u><sup>1,†</sup>, Matt LeBlanc<sup>1</sup>, Dave Cutts<sup>1</sup>, JiJi Fan<sup>1</sup>, Loukas Gouskos<sup>1,†</sup>, Ulrich Heintz<sup>1</sup>, Julie Hogan<sup>1,3</sup>, Greg Landsberg<sup>1</sup>, Jennifer Roloff<sup>1</sup>, Gabriella Sciolla<sup>2</sup>, and Eleni Vryonidou<sup>4</sup>

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• We at **Brown University** are delighted to host the Higgs 2025 conference

- The conference will occur from October 27 to 31, 2025, linking high energy with the Halloween festivities.
- The venue is the Museum of Rhode Island School of Design
- ▶ In Providence, Rhode Island, USA.









## Providence

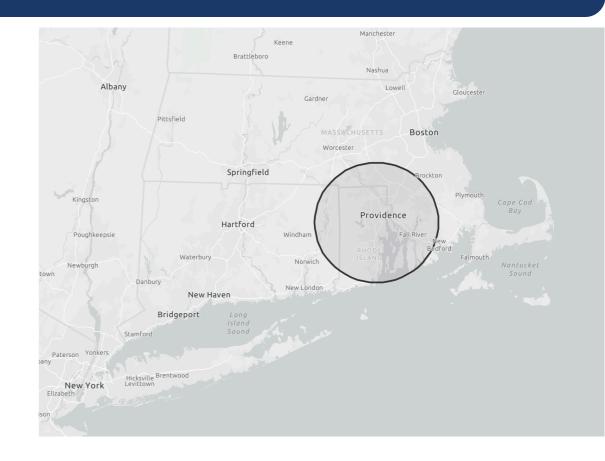
- Providence is known for its rich history, vibrant arts scene, and culinary excellence.
  - Among the oldest cities in New England, it is blended with former textile industrial buildings and its busy port.
- The city offers many lodging options:
  - from boutique hotels to budget-friendly accommodations.
    - Negotiated rates with Brown and RISD
- Proximity to major transportation hubs:
  - a hassle-free experience for international and domestic delegates.
  - Reachable by plane and train
- Many activities to enrich the conference experience:



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- Historic walking tours, renowned theaters, waterfront parks, and gourmet dining...
- and ghost tours right around Halloween





# **Brown University**

- Founded in 1764, Brown University
  - Seventh-oldest institution of higher education in the USA.
  - First Ivy League university to accept students regardless of religious affiliation,
  - Open curriculum, introduced in the 1970s,
  - Students to design their courses of study.
- Physics department faculty members includes:
  - Two Nobel laureates, two American Association for the Advancement of Science Fellows, six Sloan Research Fellows, six American Physical Society Fellows, a Guggenheim Fellow, and two Presidential Early Career Award recipients for Scientists and Engineers.





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- Our High Energy Experimental group: by Profs. Gaetano Barone, Matt Le Blanc, Dave Cutts, Loukas Gouskos, Ulrich Heintz, Greg Landsberg, and Jennifer Roloff plays a leading role in the CMS experiment of the LHC
- Our group comprises one research scientist, five postdoctoral researchers, two engineers, and about twenty graduate and undergraduate students.



#### Venue

- The prestigious Rhode Island School of Design museum.
  - Founded in 1877 as a coeducational institution aiming at the general training & advancement of public Art Education,
  - The venue for plenaries and parallels will be in the newly renovated annex
  - Adjacent to the historic buildings of Brown University.
  - It provides state-of-the-art conference facilities.
  - Symbolizes the interdisciplinary collaboration between science and art.
  - Hosting the conference at an art museum provides a unique, unbeatable experience that encourages creativity.
- Breaks and Catering:
  - Provided by alumni of the Culinary School of Providence in collaboration with RSID and Brown Catering Services.



- Diverse team driven by the local members of the Brown community and augmented by external collaborators to increase the plurality of the effort.
  - A blend of young and senior researchers
  - From the northeast, USA and European collaborations.
  - Theory & experiment (both ATLAS and CMS) locally and overseas.
- Northeast USA:



- Brown University:
  - Stephon Alexander (theory),
  - Gaetano Barone (CMS),
  - Matt LeBlanc (CMS),
  - Dave Cutts (CMS),
  - ► JiJi Fan (theory),
  - Loukas Gouskos (CMS),
  - Ulrich Heintz (CMS),
  - ► Julie Hogan (CMS),
  - Greg Landsberg (CMS),
  - Jennifer Roloff (CMS)



- Brandeis University:
  - Aram Apyan (ATLAS),
  - Gabriella Sciolla (ATLAS)

• Europe:



The University of Manchester

- University of Manchester:
  - Eleni Vryonidou (theory)



November-24

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The University of Manchester

- University of Manchester:
  - Eleni Vryonidou (theory)

- Long-standing research tenure in exploring the theoretical nature of the Higgs boson, focusing on Effective Field Theory extensions of the Standard Model.
- Support from an overseas person in the organization will provide a nonlocal point of view on organizational matters, widening our susceptibility to the needs of attendants traveling from overseas.



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- Brandeis University:
  - Aram Apyan (ATLAS),
  - Gabriella Sciolla (ATLAS)

- Long-standing tenure researching the Higgs boson properties and the electroweak sector at the LHC,
  - focusing primarily on Diboson decays and lepton final states.
- Hold the institutional responsibilities of the ATLAS experiment for projecting and constructing the ATLAS silicon strip tracker for Phase 2 of the LHC.



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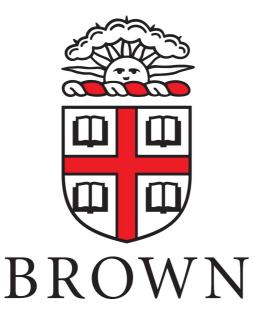
- Major contributors to in critical aspects of the CMS:
  - Silicon strip tracker and the hadron calorimeter operations
  - Researching and developing Phase 2 HL-LHC upgrades for the outer tracker and the endcap calorimeter.
- R&D cutting-edge technologies for future particle physics experiments.
- Understanding with precision the structure of the Higgs potential by investigating single, double Higgs, and triple Higgs productions.
- Synergy with QCD and top quark programs
- Focusing on the intersection of high-energy physics and cosmology, investigating the links between the electroweak potential and inflation.

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#### Conclusions

- We are grateful to the Uppsala team for a delightful Higgs2024 organization.
  - Thanks to Elin Bergeås Kuutmann, Rikard Enberg, Arnaud Ferrari (chair), Rebeca Gonzalez Suarez, Stefano Moretti, Harri Waltari, Axel Gallén, and Yong Sheng Koay
  - Many thanks to the International Organising Committee and to the Program Committee
- We are at exciting times for hosting the 2024 and 2025 conferences
  - Bridging the end of the third data-taking period, Run 3 of the LHC, and the dawn of the High-Luminosity LHC era.
  - We expect Higgs2025 to continue to play a pivotal role in discussing a wealth of LHC Run 3 results and setting the field's directions for the years to come through all the delegates.

#### October 27 to 31, 2025 at the Rhode Island School of Design Museum in Providence USA







### Additional material.