



Thank You!



LOC: Tom Blum, Luchang Jin





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10th anniversary plenary workshop of the
Muon $g-2$ Theory Initiative in 2027

Application submitted in early 2026 for a Royal Society Hooke Meeting Award.

- To hold **10th Plenary Workshop of the Muon g-2 Theory Initiative 2027** in-part at the **Royal Society, London**.



- Royal Society is UK's national academy of science, and the oldest continuously existing scientific academy in the world.
- Fellowship includes Isaac Newton, Charles Darwin, Albert Einstein, Dorothy Hodgkin, Stephen Hawking, etc.
- Award includes:
 - Hire of the meeting rooms at the Royal Society for two full days (meeting rooms can accommodate up to 270 registered attendees).
 - Tea, coffee and refreshments for all attendees during breaks.
 - A poster session and drinks reception for all attendees.
 - Promotion of the meeting by the Royal Society itself.
 - Funding towards meals, travel and accommodation for some attendees (to be understood/negotiated).
 - All-in-all, estimated to be $\mathcal{O}(100k)$ grant.

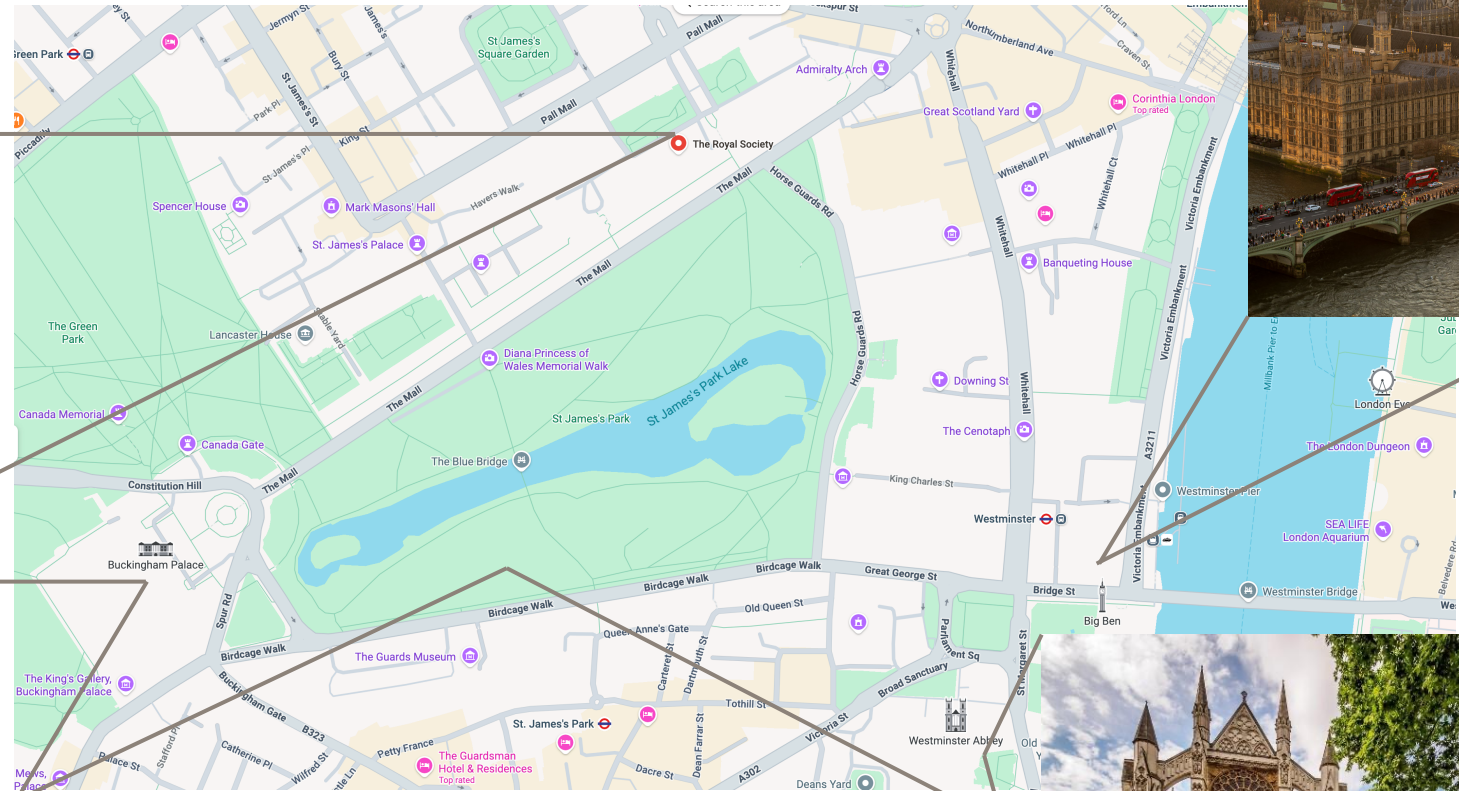


THE ROYAL SOCIETY

10th Plenary Workshop of the Muon g-2 Theory Initiative 2027 at Royal Society, London & UCL

- Proposal is to have the 2027 workshop in London, split between the Royal Society and UCL:

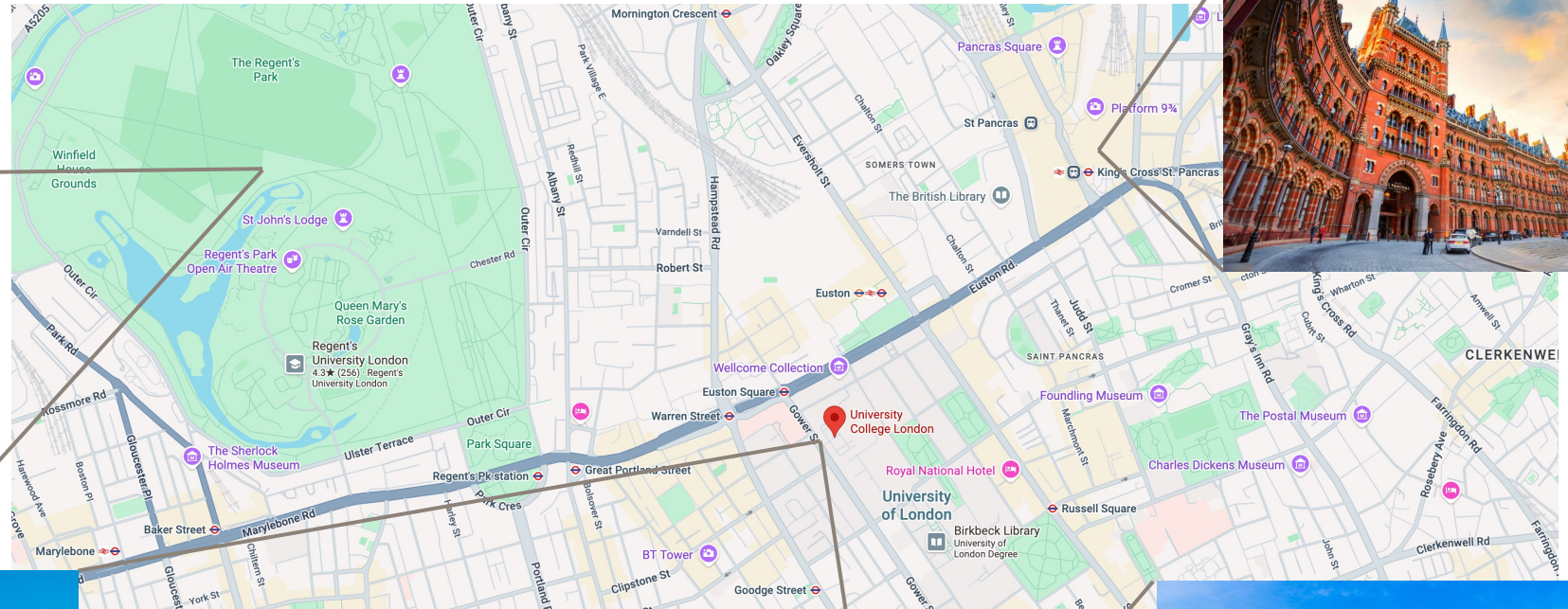
**Monday – Tuesday
at the Royal Society**



10th Plenary Workshop of the Muon g-2 Theory Initiative 2027 at Royal Society, London & UCL

- Proposal is to have the 2027 workshop in London, split between the Royal Society and UCL:

**Wednesday – Friday at
University College
London (UCL)**



**UCL is 200
years old
this year!**



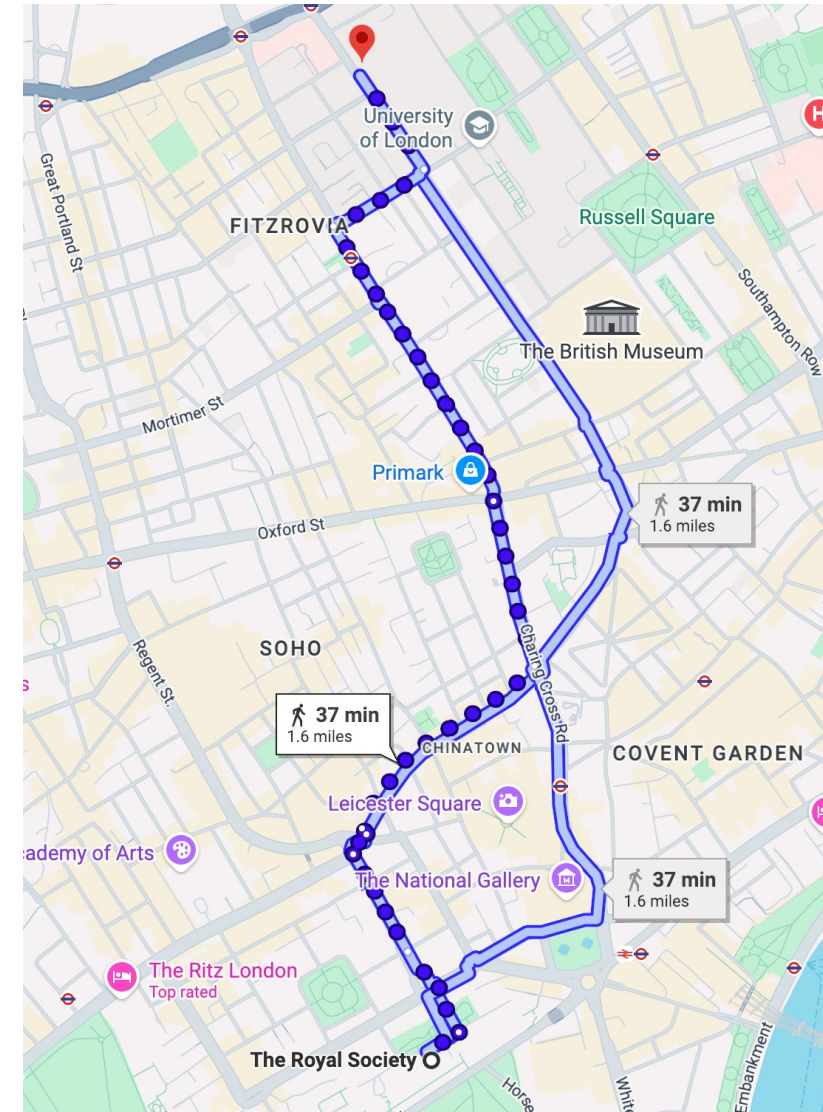
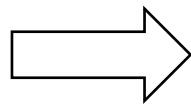
10th Plenary Workshop of the Muon g-2 Theory Initiative 2027 at Royal Society, London & UCL

- Proposal is to have the 2027 workshop in London, split between the Royal Society and UCL
- UCL Physics & Astronomy looks forward to welcoming you!
- Dates to be confirmed:
 - Must be negotiated with Royal Society against other awardees
 - And planned around UCL's teaching schedule.
 - More details to follow soon...

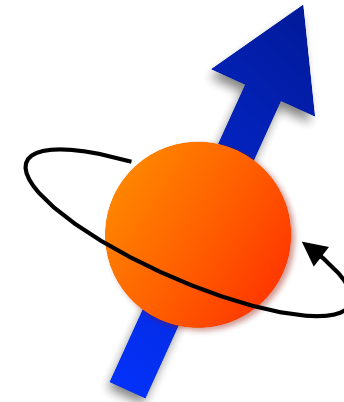
Stay tuned, and looking forward to **hopefully seeing you in London in 2027!**
(For the 10th anniversary of the Theory Initiative!)



10 YEARS...



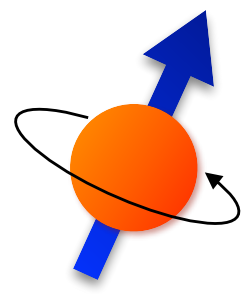
Planning for next year



Steering Committee

- | | |
|--|--------------------------------|
| ● Gilberto Colangelo (Bern) | ● Tsutomu Mibe (KEK) |
| ● Achim Denig (Mainz) | J-PARC Muon g-2/EDM experiment |
| ● Aida El-Khadra (UIUC) chair | ● Lee Roberts (Boston) |
| ● Martin Hoferichter (Bern) | Fermilab Muon g-2 experiment |
| ● Christoph Lehner (Regensburg) co-chair | ● Thomas Teubner (Liverpool) |
| ● Laurent Lellouch (Marseille) | ● Hartmut Wittig (Mainz) |

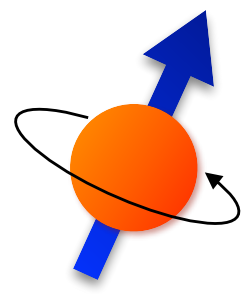
<https://muon-gm2-theory.illinois.edu>



Agenda

Aim for WP #3 in ~ 3-4 years

- 📌 focused workshop on $\Delta\alpha$ in spring 2027?
- 📌 focus topics and groups
- 📌 10th plenary workshop in London in September 2027
- 📌 guest-edited Royal Society issue: [a special opportunity for the tenth anniversary](#)
- 📌 organize school on g-2 (and related topics) in the week prior to 10th workshop?
- 📌 plans for future workshop on α/α_e (following MITP workshop in 2025).



Focus topics and focus groups

experimental cross section measurements:

1. guidance and interpretation of systematic errors
2. standards: blinding process for ensuring bias-free analysis, ...
3. virtual scientific seminars to scrutinize new results

tau IB corrections:

4. interplay between dispersive and lattice calculations

lattice HVP:

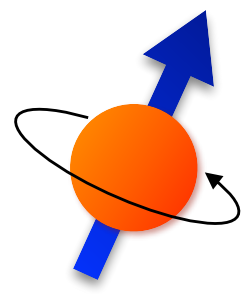
5. scale setting, gradient flow, separation schemes, LD contribution:
further comparisons using more scales

lattice HLbL:

6. sign of disconnected pion tff
7. combine dispersive and lattice HLbL

new MC generators/tools

coordinate with Radio MonteCarLow to test and apply



Royal Society proceedings

- 📌 10th plenary workshop in London sponsored and hosted by the Royal Society and UCL
 - ➡ Alex Keshavarzi
- 📌 Royal Society expects that meetings they sponsor yield guest-edited issue of the *Philosophical Transactions of the Royal Society A*
 - ➡ an intriguing special opportunity in light of the tenth anniversary to consider:
 - 📌 updates to some averages in WP25
 - 📌 status updates on ongoing efforts to resolve the tensions between experimental measurements
 - 📌 a process towards SM prediction(s) for $\Delta\alpha$
 - 📌 inclusion of a_e
- 📌 ➡ create new working groups
 - The process should ensure that opportunities are created for early career members for engagement & leadership.
 - The process to plan such a proceedings paper should start **before** the London workshop