42nd International Symposium on Lattice Field Theory (Lattice 2025)



Contribution ID: 276 Type: Talk

BMW/DMZ calculation of the hadronic vacuum polarisation for the muon magnetic moment

Monday 3 November 2025 11:15 (30 minutes)

For twenty years, a persistent discrepancy between experimental measurements and theoretical calculations of the muon anomalous magnetic moment have provided tantalising hints of new physics. In recent years, improvements to the experimental precision have appeared to make the tension stronger and stronger. However, at the same time, our lattice calculation overturned the theoretical consensus, completely eliminating the tension. I will present the latest results from the Budapest-Marseille-Wuppertal (BMW) and DMZ collaborations, with a determination of the hadronic vacuum polarisation contribution to a precision of 0.45%.

Parallel Session (for talks only)

Plenary talk

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Session Classification: Plenary session