



Contribution ID: 5

Type: **Plenary Presentation**

## **Tau Data-Based Evaluation of hadronic vacuum polarization contribution to muon $g-2$**

*Tuesday 5 December 2023 11:15 (25 minutes)*

We compute for the first time the  $\tau$  data-driven Euclidean windows for the hadronic vacuum polarization contribution to the muon  $g-2$ . We show that  $\tau$ -based results agree with the available lattice window evaluations and with the full result. On the intermediate window, where all lattice evaluations are rather precise and agree,  $\tau$ -based results are compatible with them. This is particularly interesting, given that the disagreement of the  $e^+e^-$  data-driven result with the lattice values in this window is the main cause for their discrepancy, affecting the interpretation of the  $a_\mu$  measurement in terms of possible new physics.

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**Session Classification:** Tuesday before lunch