

## **Towards data-driven evaluation of the nucleon polarizability effects contributing to the Lamb shift**

*Monday, 16 October 2023 17:50 (20 minutes)*

The Bernabéu-Tarrach sum rule, the “virtual sibling” of the Baldin sum rule, will be discussed. It could potentially offer an additional data-driven constraint on the electric polarizabilities of the nucleon. Moreover, its convergence implies the sum rule for the unknown subtraction function in the two-photon exchange contribution to the Lamb shift. The verification of these sum rules will be demonstrated within the framework of covariant chiral perturbation theory and the naive parton model.

### **Parallel Session**

Low-Energy Nucleon Structure

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**Session Classification:** Low Energy Nucleon Structure