



Contribution ID: 83

Type: **Talk**

On the quantisation of electric charge

Friday 9 September 2022 12:00 (20 minutes)

Quantization of electric charge is one of the biggest mysteries of modern physics. In 1931, Dirac showed that this observation could be explained if there exists magnetic monopoles. However, no magnetic monopoles have been located through experimental search. In this presentation, I shall propose an alternative proof of the quantization of electric charge, based on a non-relativistic semi-classical description of electrostatic fields. This model was presented in ICNFP 2020, to explain the non-locality problem of the Aharonov-Bohm effect and was subsequently published in *Physica Scripta* Vol. 96 084011 (2021).

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

Yes

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Session Classification: Quantum Physics, Quantum Optics and Quantum Information