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## Modeling RF Breakdown

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Around 1900, it was shown that voltage breakdown could occur at a predetermined surface field, rather than through an electron avalanche. The first simple explanation of this data was given about three years later. In spite of this early progress, the field of vacuum breakdown is still not settled science. We describe our self-consistent model of rf breakdown that seems to provide useful answers to a wide variety of questions. We compare our model with mechanisms proposed by others to explain breakdown and the surface damage it produces, and describe experiments to further improve our understanding.

### **Type of contribution**

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### **session**

Modelling and Simulations

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