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**The Experimental Determination of the Newtonian Constant of Gravitation**

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Just over two hundred years ago in his most celebrated publication Henry Cavendish began the description of his experiment with the words, “the apparatus is very simple.” Today the techniques for determining  $G$  remain simple in principle. Yet in practice these experiments still present some of the most difficult challenges in precision measurement. I will discuss these challenges as well as two recent  $G$  experiments on which I have worked. The first is the BIPM torsion-strip balance and the other is the JILA suspended Fabry-Perot cavity.