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1003-01-213 June Barrow-Green* (J.E.Barrow-Green@open.ac.uk), Faculty of Mathematics and Computing, The Open University, Walton Hall, MK7 6AA Milton Keynes, England. "The dramatic episode of Sundman": the changing fortunes of a mathematical result. Preliminary report.

During the years 1907 to 1909 the Finnish mathematical astronomer, Karl Sundman, produced a remarkable solution to the three-body problem. Less than decade before Tisserand, echoing earlier remarks of Poincar, had declared that such a solution would be 'manifestly impossible'. In 1912 Sundman's result was republished in French and the following year he was awarded the Prix Pontcoulant of the Paris Academy of Sciences. Several commentaries on his work were produced and his achievement was lauded across Europe. But as the 20th century progressed, his name and his solution faded into obscurity, and it is only in recent years that the significance of his contribution has once again been recognised.

In this talk I shall discuss Sundman's solution and indicate how its reception reflects shifting concerns of mathematicians during the 20th century. (Received August 30, 2004)