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Tatiana Roque* (tati@im.ufrj.br). *The works of G.D. Birkhoff and the reception of Poincaré's researches on qualitative theory of differential equations in the USA.*

In his Semicentennial address of the American Mathematical Society, Birkhoff affirms that Americans begin to pay attention to Poincaré's works in 1906, when F.R. Moulton published an article about the three-body problem. In 1912, Birkhoff proves Poincaré's Last Geometric Theorem using a geometrical approach and shows that it would be impossible to understand its consequences with the method of analytic continuation. We have some testimonials that this work is responsible for Birkhoff's projection in the American mathematical community, as O. Veblen remarks in Birkhoff's biographical memoir.

Our intention in this communication is to analyze the reception of Poincaré's works in the USA during the period from 1906 to the 1920s. Some articles published by Birkhoff suggest that there have been reactions against the qualitative methods. We propose to investigate the role Birkhoff played in highlighting the innovative character of Poincaré's methods, as well as in advocating the legitimacy of the results they allow him to obtain. Special attention is given to the mathematical context in which Poincaré's Last Geometric Theorem was introduced. (Received September 10, 2010)