

# Henri Poincaré's scientific outlook

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Henri Poincaré Archives (CNRS, UMR 7117)

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**[A presentation within the seminar series for mathematical education  
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The French mathematician Henri Poincaré (1854-1912) is celebrated by contemporary scientists as the founder of algebraic topology and modern systems dynamics (including chaos theory), and as a leading contributor to classical electrodynamics, relativity and quantum theory. Likewise, philosophers of science credit Poincaré with one of the principal theories of the foundations of scientific knowledge, known as conventionalism, and presented in the volume *Science and Hypothesis* (1902). I provide an overview of recent writings on Poincaré's life in science, and suggest how Poincaré's discoveries in mathematics and physics formed and modulated his conventionalist doctrine. My remarks are complemented by a 26-minute video illustrating the intellectual and technological contexts of Poincaré's science.