

"The algebraic cast of Poincaré's *Méthodes nouvelles*.

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Poincaré's approach to the three body problem has often been celebrated as a starting point of chaos theory in relation to the investigation of dynamical systems. Yet, Poincaré's strategy can also be analyzed as molded on - or casted in - some specific algebraic practices for manipulating systems of linear equations. These practices shed new light on both the novelty and the collective dimensions of Poincaré's *Les méthodes nouvelles de la mécanique céleste*. As the structure of a cast-iron building may be less noticeable than its creative façade, the algebraic cast of Poincaré's strategy is broken out of the mold in generating the novel methods of celestial mechanics. But as the various components that are mixed in some casting process can still be detected in the resulting alloy, the algebraic cast of the *Méthodes nouvelles* points to some collective dimensions of Poincaré's methods.
