1106-01-1776 **Tatiana Roque***, Instituto de Matemática-UFRJ, Av. Athos da Silveira Ramos 149, Centro de Tecnologia-Bloco C, Rio de Janeiro, 21941-909, Brazil. *How drawings sprang up in a particular field of celestial mechanics.*

By using the methodology of text networks, I have identified a specific practice of drawings in the end of the 19th and the beginning of the 20th century. Mathematicians and astronomers that made use of periodic orbits to analyze special cases of the three body problem started to draw these curves, what was not usual in similar texts of the same period. By exploring texts published in journals like *Astronomische Nachrichten* or *Bulletin Astronomique*, I intend to show to what extent this new practice was linked to Poincaré's proposals, who had not himself presented drawings of periodic phenomena, what astonished some of his contemporaries, like Heinrich Hertz.

This expedient of drawings is a question about communicating mathematics that also implies a reflection upon the habits and the professional skills involved in scientific research. The computations and drawings demanded in celestial mechanics became more and more mathematical. As George Darwin remarks, astronomers increasingly needed the skills of professional computers who were also mathematicians. The same problem appears in texts of other scientists. This talk proposes to discuss the role of drawings in the boundary of mathematics and celestial mechanics in the period mentioned. (Received September 15, 2014)