## Recent progress on Maxwell's conjecture

## Ya-Lun Tsai Department of Applied Mathematics National Chung Hsing University

2023/1/17

## Abstract

In 1954, J. C. Maxwell made an claim in his book, A Treatise on Electricity and Magnetism, that the total number of points of equilibrium (all assumed nondegenerated) of any configuration with l charges in  $\mathbb{R}^3$  never exceeds  $(l-1)^2$ .

To this day, such problem is still open even for l=3. In this talk, we will present some recent progress on this problem, called Maxwell's conjecture. Especially, we will focus on some results for l=4.