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Jonathan Mboyo Esole* (mboyoesole@gmail.com), Northeastern University, Department of Mathematics, 360 Huntington Avenue, Boston, MA 02115. *Hyperplane arrangements and birational geometry of elliptic fibrations.*

Elliptic fibrations obtained by crepant resolutions of Weierstrass models resulting from Tate's algorithm are often used by physicists to model gauge theories characterized by a reductive Lie group G with Lie algebra \mathfrak{g} and a representation \mathbf{R} of G . I will explain how the birational geometry of such elliptic fibrations is controlled in many ways by a hyperplane arrangement defined from the data of \mathfrak{g} and \mathbf{R} . (Received September 26, 2017)