

1163-17-1579

Katherine A Maxwell* (maxwe204@umn.edu). *The Neveu-Schwarz algebra and the super Krichever map.*

In 1986, Manin conjectured that representations of the Neveu-Schwarz (NS) algebra must be related to the moduli space of SUSY curves. We explain the compatibility of these representations and the super Krichever map, which maps the moduli space of SUSY curves into the super Sato grassmannian. We find that the Lie superalgebra of global superconformal vector fields on an affine SUSY curve is perfect, and that the NS algebra acts on the super Mumford isomorphism with zero central charge. Also discussed is a NS uniformization of the moduli space of SUSY curves. (Received September 15, 2020)