

**NIHONKAI MATHEMATICAL JOURNAL**

Vol. 33, No. 2 (2022)

**Contents**

Toshikazu ABE :

Complex scalar multiplications on the Poincaré disk ..... 39

Mitio TAKANO :

A modified subformula property for the modal logic KG1 ..... 45

Benjamin CAHEN :

A note on the harmonic representation of  $SU(p, q)$  ..... 61

Ryuji TANIMOTO :

Fundamental representations of  $\mathbb{G}_a$  into  $SL(3, k)$  in positive characteristic ..... 81