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Michael Lau* (michael.lau@mat.ulaval.ca), Universite Laval, Canada, and **Olivier Mathieu**,
Universite de Lyon 1, France. *Weight modules for A_1 -graded Lie algebras*. Preliminary report.

The Tits-Kantor-Koecher construction associates a Lie algebra L , graded by the root system of sl_2 , to any unital Jordan algebra J . We will describe some infinite-dimensional modules for the universal cover of such Lie algebras. The modules have only finitely many weight spaces, and their structure has some connections to classical combinatorics of symmetric polynomials. This talk is based on joint work in progress with Olivier Mathieu. (Received January 24, 2019)