

# WEAKLY-SKEW IDENTITIES OF THE CAYLEY-DICKSON ALGEBRA

FERNANDO HENRY\*

\*Departamento de Matemática - Instituto de Matemática e  
Estatística Universidade de São Paulo, Brazil  
*E-mail address:* [henry@ime.usp.br](mailto:henry@ime.usp.br)

## Resumo

In this work we find all skew identities of the simple Malcev algebra  $\mathbf{sl}(\mathbb{O})$  and the simultaneously skew and weak identities of the octonion algebra  $\mathbb{O}$ . For those special cases, we show positively the Shestakov-Zhukavets Conjecture. Finally, we show the Shestakov-Zhukavets Conjecture would be false with a slight relaxation of the hypothesis.