

- MARCIN SABOK, *Bowen's Problem 32 and the conjugacy problem for systems with specification.*

McGill University.

*E-mail:* [marcin.sabok@mcgill.ca](mailto:marcin.sabok@mcgill.ca).

We show that Rufus Bowen's Problem 32 on the classification of symbolic systems with the specification property does not admit a solution that would use concrete invariants. To this end, we construct a class of symbolic systems with the specification property and show that the conjugacy relation on this class is too complicated to admit such a classification. More generally, we gauge the complexity of the classification problem for symbolic systems with the specification property. Along the way, we also provide answers to two questions related to the classification of pointed systems with the specification property: to a question of Ding and Gu related to the complexity of the classification of pointed Cantor systems with the specification property and to a question of Bruin and Vejnar related to the complexity of the classification of pointed Hilbert cube systems with the specification property. This is joint work with Konrad Deka, Dominik Kwietniak and Bo Peng.