## **On the affine invariant**

of

## hypersemitoric systems

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Integrable systems are dynamical systems with symmetries and have been of interest to mathematicians and physicists for several decades. Despite the enormous interest on these systems a full (symplectic) classification as not yet been achieved. In order to tackle the classification problem, mathematicians have focused on simpler cases. For toric and semitoric systems a full symplectic classification of these systems has been achieved and in particular one of the invariants needed to classify such systems is called the polytope invariant.

In this talk I present a generalization of this invariant for more general classes of integrable systems, such as hypersemitoric ones.