

**Poisson cohomology in arbitrary dimension**  
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Poisson Geometry is the natural frame for Deformation Quantization. Kontsevich's formality theorem provides complete understanding of the emergence of Poisson cohomology in deformation quantization of Poisson manifolds. In recent years many papers on Poisson homology and primarily on Poisson cohomology have been published. Cohomology of regular Poisson manifolds, (co)homology and resolutions, duality, cohomology in low dimensions or for specific cases, extensions of Poisson cohomology, e.g. Lie algebroid cohomology, Jacobi cohomology, Nambu-Poisson cohomology, double Poisson cohomology, have been investigated. However, no appropriate conceptual approach is available so far. In this talk we propose a general approach to the cohomology of the Poisson tensors of the Dufour-Haraki classification. We also show that our cohomological technique for strongly classical r-matrix induced three-dimensional Poisson structures can be extended to an arbitrary dimensional space. In the main, Poisson cohomology reduces to a Koszul cohomology and a relative cohomology.