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## ``Kontsevich's deformation quantization and invariant differential operators''

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In recent work, M. Kontsevich has conjectured and proved a remarkable ``formality'' result for the differential graded Lie algebra of polydifferential operators on a smooth manifold. We shall describe an application of this result to two classical problems in Lie theory:

1. Lifting an invariant eigendistribution from a Lie algebra to a Lie group
2. Local solvability of bi-invariant differential operators on a Lie group