



About the Hochschild-Kostant-Rosenberg theorem for differentiable manifolds

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In this notes it will be provided a set of techniques which can help one to understand the proof of the Hochschild-Kostant-Rosenberg theorem for differentiable manifolds. Precise definitions of multidifferential operators and polyderivations on an algebra are given, allowing to work on these concepts, when the algebra is an algebra of functions on a differentiable manifold, in a coordinate free description. Also, it will be constructed a cup product on polyderivations which corresponds on (Hochschild) cohomology to wedge product on multivector fields. At the end, a proof of the above mentioned theorem will be given.

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