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Section:

8. Analysis

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Ponge, Raphael, Orsay (France)

Wodzicki Residue for Heisenberg Manifolds

We construct a Wodzicki residue for Heisenberg manifolds. Such a manifold M comes with a sub-bundle $\mathcal{V}$ of TM such that $\mathcal{V}$ and $[\mathcal{V},\mathcal{V}]$ span TM. This the case for CR and contact manifolds. We prove that this Wodzicki residue extends the Dixmier trace and is the unique trace on the algebra of pseudodifferential operators we consider.