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## Octonion-valued forms and the Spin(9)-invariant 8-form

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**Abstract:** It is well known that there exists a unique Spin(9)-invariant 8-form on the octonionic plane. Over the decades, this fundamental invariant has been studied and described in number of equivalent ways.

Within the talk, a new explicit algebraic formula is given in terms of octonion-valued coordinate 1-forms. Our approach thus naturally generalizes the standard expression of the Kähler 2-form. For completeness, analogous identities for the Kraines form, the Cayley calibration and the associative calibration are presented as well.

### REFERENCES

- [1] J. Kotrbatý, *Octonion-valued forms and the canonical 8-Form on Riemannian manifolds with a Spin(9)-structure*, J. Geom. Anal. (2019), <https://doi.org/10.1007/s12220-019-00209-z>.