

## The signature of a fibration modulo 8

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In this talk we shall be concerned with the residues modulo 4 and modulo 8 of the signature  $\sigma(M) \in \mathbb{Z}$ of an oriented 4k-dimensional geometric Poincaré complex  $M^{4k}$ . The precise relation between the signature modulo 8, the Arf invariant and the Brown-Kervaire invariant will be given. Furthermore we shall discuss how the relation between these invariants can be applied to the study of the signature of a fibration modulo 8.

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