

Even manifolds

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Abstract

A $4k$ -dimensional, oriented manifold is even if the intersection form on the integral homology has all squares even. There is a condition on the tangent bundle which is equivalent to even and following Lashof we can study the resulting structures on bundles. Several corollaries will be given including computing the resulting bordism groups in terms of more classical ones. Some applications to 4-manifolds will also be given.