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„Positive scalar curvature on manifolds with abelian fundamental groups.“

Abstract:
We state a homology invariance principle for the existence of positive scalar curvature metrics on manifolds with Baas-Sullivan singularities. Combined with bordism and homology calculations of abelian p-groups we prove that atoral closed non-spin manifolds of dimension at least 5 and with odd order abelian fundamental groups admit positive scalar curvature metrics.