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P Laul, J Metcalfe, S Tikare and M Tohaneanu* (mtohanea@math.jhu.edu). *Localized energy estimates on Myers-Perry space-times.*

We prove local energy estimates on $(1+4)$ -dimensional Myers-Perry black hole backgrounds with small angular momenta. The Myers-Perry space-times are higher dimensional generalizations of the $1+3$ Kerr backgrounds where additional planes of rotation are available while still maintaining axial symmetry. Once it is determined that all trapped geodesics have constant r , the method developed by Tataru and the fourth author, which perturbs off of the Schwarzschild case by using a pseudodifferential multiplier, can be adapted. (Received February 09, 2014)