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Margaret I Doig*, midoig@syr.edu. *Homology cobordism classification of lens spaces*. Preliminary report.

We will discuss an effort to classify the lens spaces that are rational homology cobordant. If p is odd, it is known that two lens spaces $L(p,q)$ and $L(p,q')$ are cobordant iff they are diffeomorphic under an orientation-preserving diffeomorphism. We will discuss efforts to extend this result for all lens spaces using the Heegaard Floer d -invariants or correction terms, which are invariants of spin- c manifolds under rational homology cobordism. (Received January 26, 2014)