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Daniel A Lichtblau* (danl@wolfram.com), Wolfram Research, Inc., 100 Trade Centre Dr,
Champaign, IL 61820. *Integer Linear Programming, Frobenius Instances, and Frobenius Numbers.*

I will show how lattice reduction and branch-and-bound methods may be used in tandem to solve Frobenius instance problems. We apply much the same methods to other aspects of finding Frobenius numbers. Moreover the instance solver can be used to give good (as in tight, with high probability) bounds on the Frobenius number, in many cases where the latter computation is intractable with current methods. (Received September 07, 2007)