1049-90-101Ellis L. Johnson* (ejohnson@isye.gatech.edu), Georgia Tech, School of ISyE, Atlanta, GA30332-0205. Facets of the Mixed Integer Cut. Preliminary report.

Gomory's mixed integer cut (MIC) has received attention as being important both from the shooting experiment and from strengthening the LP before branch-and-bound. The shooting experiment is discussed and its results explained. MIC is known to be a facet for every cyclic group master problem. We show that the facets of this face are closely related to knapsack facets and are in fact what are called MIC tilting facets in [J. Aráoz, L. Evans, R.E. Gomory, E.L. Johnson, "Cyclic Group and Knapsack Facets", Mathematical Programming Series B 96, 377-408, 2003]. (Received February 25, 2009)