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Ferenc Fodor* (ffodor@tntech.edu), Department of Mathematics, Tennessee Technological University, Box 5054, Cookeville, TN 38505-0001. *On Malfatti's Problem.*

There is a family of problems about packing circles in a triangle. In particular, Malfatti's problem is concerned with finding three non-overlapping circular discs, not necessarily the same radius, in a triangle such that the sum of their areas is maximal. The same problem can also be posed for n circles. As of now, only the $n = 2$ case is solved. Malfatti originally provided an arrangement of 3 circles which proved not to be the optimal one. The greedy algorithm was conjectured to give a better packing for all triangles by Goldberg. In this talk, we give a proof of this conjecture. (Received October 01, 2000)