

Michigan Math Club

Thursday at 4pm in the Commons

Free Pizza and Pop

Fast matrix multiplication

Greg Muller

Abstract for 6 November

Here are two surprising facts.

1) The standard method for computing the product of two matrices is not the fastest method.

2) We still don't know the fastest method.

I will describe some algorithms which outperform standard multiplication, as well as the many applications of fast algorithms. I will also describe how finding fast matrix multiplication algorithms can be translated to a certain dense-packing problem inside finite groups.

