Matrix Braids

— Joseph kolibal
Department of Mathematics and Physics
The University of New Haven

Abstract: Braiding matrices arise as a subtopic of the the Yang-Baxter equation, which has been studied extensively due to application in numerous fields of mathematics and physics. We connect these to a simplified matrix representation and focus on obtaining solutions to matrix braids by considering special matrices where solutions are more easily found. Finally, we suggest a fixed point iteration algorithm to determine the braid complement of a given matrix, if it exists.

Further Information
For further information, please contact Dr. Yasanthi Kottegoda at the Department of Mathematics and Physics, Office: Maxcy 315, 203-932-1206, YKottegoda@newhaven.edu.