



# Nuclear Reactions Make Stars Explode

Are you interested in learning what makes massive stars explode? Ask Maruf Abubakar, a graduate student in the Department of Physics and Astronomy, who recently studied nuclear reactions using the particle accelerators at Nuclear Science Laboratory at the University of Notre Dame, Indiana. Maruf recreated the reactions in laboratory that occurs inside massive stars (8 to 15 times the mass of our Sun) toward the end of their lives, leading to the stellar explosion known as Core-Collapse Supernovae. Maruf is working with Jaspreet Randhawa at Mississippi State University and is thankful to the collaboration between Mississippi State University and University of Notre Dame, which made these studies possible.

