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**Dibyajyoti Deb\*** ([dibyajyoti.deb@oit.edu](mailto:dibyajyoti.deb@oit.edu)), 3201 Campus Drive, Oregon Institute of Technology, Mail Stop 105, Klamath Falls, OR 97601. *Fun applications of Abstract Algebra: The 15 Puzzle.*

Abstract Algebra, at first glance seem to have very few applications in the real world, which deters undergraduate students from taking the class unless it is mandatory. In this talk we will look at ways in which we can make Abstract Algebra fun and interesting for students. I will talk specifically about the 15 puzzle and how we can use simple Abstract Algebra to solve it. (Received September 09, 2015)