

1035-J1-1925 **Darrah P. Chavey*** (chavey@beloit.edu), 700 College St., Beloit, WI 53511. *A Java Drawing Program for Nitus, Kolam, Celtic Knots, etc.*

Marcia Ascher applies the concepts of a "Process Algebra" to capture the drawing concepts of the Malekula people in constructing the highly symmetric Nitus drawings of their culture. Similar ideas apply to many other drawing traditions, including the Kolam of India, woven rug beaters in the U.S., Celtic knots, Native American dream catchers, and others. We have developed a Java program to aid students in making such drawings, understanding process algebra concepts, and experimenting with constructing their own drawings of this form. The program has been used by our students for several years, with excellent feedback. The program and documentation are available online at <http://cs.beloit.edu/~chavey/Nitus/>. We will demonstrate the program, and some of the in-class computer exercises we've developed for use with the program. (Received September 20, 2007)