

1145-57-651

**Carolyn A Otto\*** ([ottoa@uwec.edu](mailto:ottoa@uwec.edu)). *Genus one knots and their derivatives.*

In this talk we will discuss the relationship of genus one knots and their derivatives. Specifically, we will prove that if a knot is algebraically slice and genus one, we will always be able to find a derivative of the knot with an Arf invariant of zero. Using this result, we will be able to show that there are families of knots, that are created by an infection operator, that admit a derivative with vanishing Arf invariant. We will end by showing how this result generalizes to higher genus knots. (Received September 12, 2018)