Bridging Calculus and Discrete Math via the Discrete Derivative – OR – Sequences want to be differentiated too!

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Most mathematics majors take Calculus and Discrete Mathematics early in their college careers and often consider them to be disjoint. Although well known among mathematicians, the discrete derivative often does not appear in either course. In this talk we present the discrete derivative and illustrate the parallels with the derivative studied in Calculus. We give examples where this tool can be used to solve discrete problems involving sequences and series. Lastly, we introduce discrete differential equations and compare them to their continuous analogue.

[Only Calculus II is needed to understand the mathematics in this talk.]

Date: November 28, 2018
Time: 7:00 pm
Place: Park 328