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**Janet Striuli\***, **Corey Brooke**, **Molly Hoch**, **Sabrina Lato** and **Bryan Wang**. *The index of stability: a project for undergraduate students.*

Given an ideal  $I$  in a Noetherian ring, Brodmann proved that there exists an integer  $k$  such that  $\text{Ass}(I^k) = \text{Ass}(I^{k+n})$  for all  $n \geq 0$ . The index  $k$  is called index of stability. In this talk we will survey what is known about the value of  $k$  and we will present the project that was carried out in the Fairfield REU 2016. (Received September 23, 2018)