1133-05-355 **Sean English**, **Jessica Fuller**, **Nathan Graber*** (nathan.graber@ucdenver.edu), **Pamela Kirkpatrick**, **Abhishek Methuku** and **Eric Sullivan**. *Berge-Saturation of Paths and K_3 in k-uniform hypergraphs.*

Let H be a hypergraph, and G be a simple graph on the same vertex set. We say H is *Berge-G* if there exists a bijection $f : E(G) \to E(H)$ such that for each $e \in E(G)$, we have $e \subset f(e)$. If there exists a subhypergraph of H that is Berge-G we say that H contains G, otherwise H is said to be *G-free*. A hypergraph, H is *Berge-G-saturated* if H does not contain G but $H + e$ contains G for every $e \notin E(H)$. The *Berge-saturation number*, denoted B-sat(H, G), is the minimum number of edges in a hypergraph H such that H is G-saturated.

In this talk we will discuss the Berge-saturation number for several classes of graphs and draw comparisons between Berge-saturation and saturation in the traditional graph sense. (Received August 01, 2017)