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Katie Anders* (kanders@uttyler.edu), **Daniel Arreola**, **Luisa Asencio**, **Chloe Ireland** and **Luke Smith**. *Graph Splines and the Universal Difference Property*. Preliminary report.

We study the generalized graph splines introduced by Gilbert, Tymoczko, and Viel and focus on an attribute known as the Universal Difference Property (UDP). We prove that paths, trees, cycles, and certain theta graphs all satisfy UDP. We also show that UDP is a structural property of edge labeled isomorphic graphs. We use Prüfer domains to illustrate that not every edge labeled graph satisfies UDP. (Received September 04, 2019)