## 1145-03-1575 Julia Knight, Dan Turetsky and Rose Weisshaar\* (rweisshaar11@gmail.com). Countable $\omega$ -models of KP and paths through computable $\omega$ -branching trees. Preliminary report.

It is well known that the  $\Pi_1^0$  class  $\mathcal{C}_{PA} \subseteq 2^{\omega}$  of completions of Peano arithmetic is universal among nonempty  $\Pi_1^0$  subsets of Cantor space. When we consider  $\Pi_1^0$  subsets of Baire space, however, there is no such universal example. In this talk, we consider a  $\Pi_1^0$  class  $\mathcal{C}_{KP} \subseteq \omega^{\omega}$  whose elements compute the complete diagrams of countable  $\omega$ -models of Kripke-Platek set theory (KP). We develop an analogy between how elements of  $\mathcal{C}_{PA}$  and  $\mathcal{C}_{KP}$  try to compute members of nonempty  $\Pi_1^0$  subsets of Cantor space and Baire space, respectively, and we examine how this analogy breaks down. This is joint work with Julia Knight and Dan Turetsky. (Received September 23, 2018)