1105-54-241 **Ana Mamatelashvili*** (azm0105@auburn.edu), 221 Parker Hall, Auburn University, Auburn, AL 36849. *Tukey Order and Subsets of ω_1.*

The Tukey order compares cofinal complexity of partially ordered sets. In this talk we will consider partially ordered sets of the form $\mathcal{K}(S)$, where S is a subset of ω_1 and $\mathcal{K}(S)$ denotes the collection of all compact subsets of S ordered by inclusion.

We begin by considering various order properties of these partially ordered sets. Most interestingly, we show that for unbounded S, $\mathcal{K}(S)$ has calibre $(\omega_1, \omega_1, \omega)$ if and only if $\overline{S} \setminus S$ is bounded and either S is locally compact or $\omega_1 < \mathfrak{b}$. The case for calibre (ω_1, ω) was settled by Todorčević.

Next we single out a few special Tukey classes and assign most $\mathcal{K}(S)$'s to these classes. For instance, the Tukey class of the Σ-prodcut of ω_1-many copies of ω is composed of precisely those $\mathcal{K}(S)$'s for which S is stationary, not co-stationay and $\overline{S} \setminus S$ is unbounded.

Time permitting, we will also consider the Tukey relation between posets of the form $\mathcal{K}(S)$ and $\mathcal{K}(M)$, where M is a separable metrizable space. (Received September 22, 2014)