1163-13-831 **Carmelo A. Finocchiaro**, **Sophie Frisch** and **Daniel Windisch***
(`dwindisch@math.tugraz.at`). *Prime Ideals in Infinite Products of Commutative Rings.* Preliminary report.

In this talk, we present descriptions of prime ideals and in particular of maximal ideals in products $R = \prod D_\lambda$ of families $(D_\lambda)_{\lambda \in \Lambda}$ of commutative rings. Every maximal ideal is induced by an ultrafilter on the Boolean algebra $\prod \mathcal{P}(\max(D_\lambda))$. If every D_λ is in a certain class of rings including finite character domains and one-dimensional domains, then this leads to a characterization of the maximal ideals of R. If every D_λ is a Prüfer domain, we depict all prime ideals of R. Moreover, we give an example of a (optionally non-local or local) Prüfer domain such that every non-zero prime ideal is of infinite height.

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