**BOJAN MOHAR**, Simon Fraser University

*Spectrally degenerate graphs*

The spectral radius of a $d$-degenerate graph of maximum degree $D$ is $\leq \sqrt{4dD}$. Following this, we say that $G$ is spectrally $d$-degenerate if every subgraph $H$ has spectral radius $\leq \sqrt{d\Delta(H)}$. The following rough converse will be presented: Every spectrally $d$-degenerate graph $G$ contains a vertex of degree $\leq 4d\log_2(\Delta(G)/d)$ (if $\Delta(G) \geq 2d$). The dependence on $\Delta$ cannot be eliminated. The proofs involve probabilistic techniques. This is joint work with Zdenek Dvorak.