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Invited Lecture

## BLACK HOLE MASSES FROM EMISSION LINE WIDTHS

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Reverberation mapping and scaling relationships based on reverberation results provide the underpinning of all estimates of quasar black hole masses. When applying these scaling relationships, there are potential pitfalls that are widely unappreciated and can result in biases that can, in turn, lead to systematic errors in the black hole mass function and therefore conclusions about the evolution of black holes over time. I will discuss potential sources of biases with the analysis of emission line widths and show how they can be mitigated.