

Abstract for an Invited Paper
for the APR09 Meeting of
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Spin Foam models: models of quantum space time

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I will give an overview of spin foam models which describe the dynamics of quantum gravity in a background independent context. I will focus especially on the recent developments which concern the construction of these models in 4 dimensional gravity and present some of the key results obtained in this context like the proof of the semi-classical limit and the relationship with loop quantum gravity and $SU(2)$ spin network states.