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Area of research:
Molecular Quantum Dynamics

The second slide shows Professor Laganá at a conference in Telluride surrounded by many of the leaders in the field of quantum reactive scattering.
Slide number 5 shows the title page of our first joint paper.
The next 3 slide show the evolution of this work, showing the initial apparent disagreement of my time-dependent calculations and Professor Laganá's time independent results. These were then reconciled when Professor Laganá performed his time-independent calculations on a finer energy grid – resulting in complete agreement.
Slide 10 outlines the differences between the time-dependent and time-independent approached to quantum reactive scattering.
Slide 11 shows a potential energy surface for the Li + HF → LIF + H reaction.
Slides 14 and 15 discuss the initial wavepacket for a time-dependent calculation.
Slides 16-23 show the progress of the wavepacket during the reaction.
Slides 24-26 discuss the calculation of the S matrix and the scattering cross sections.
Slides 27-36 discuss some calculations on the O + H2 → OH + H reaction and the comparison with experimental results.
Slides 37-38 discuss the real wavepacket method introduced by Stephen Gray.
Slides 39-41 quote examples of time-dependent wavepacket calculations carried out by other research workers.
Sl;ide 42 shows a photograph of Antonio Laganá at a conference I organised in Bristol.
Slide 43 lists some of my review articles.
The final slide advertises a recent book I have written.