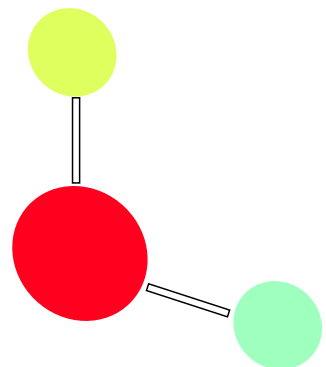
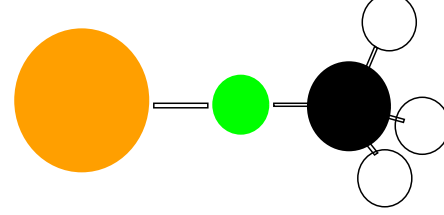
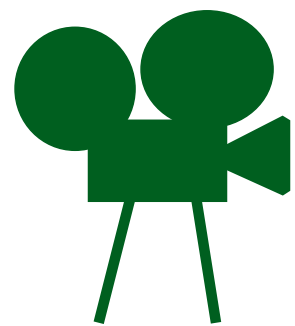
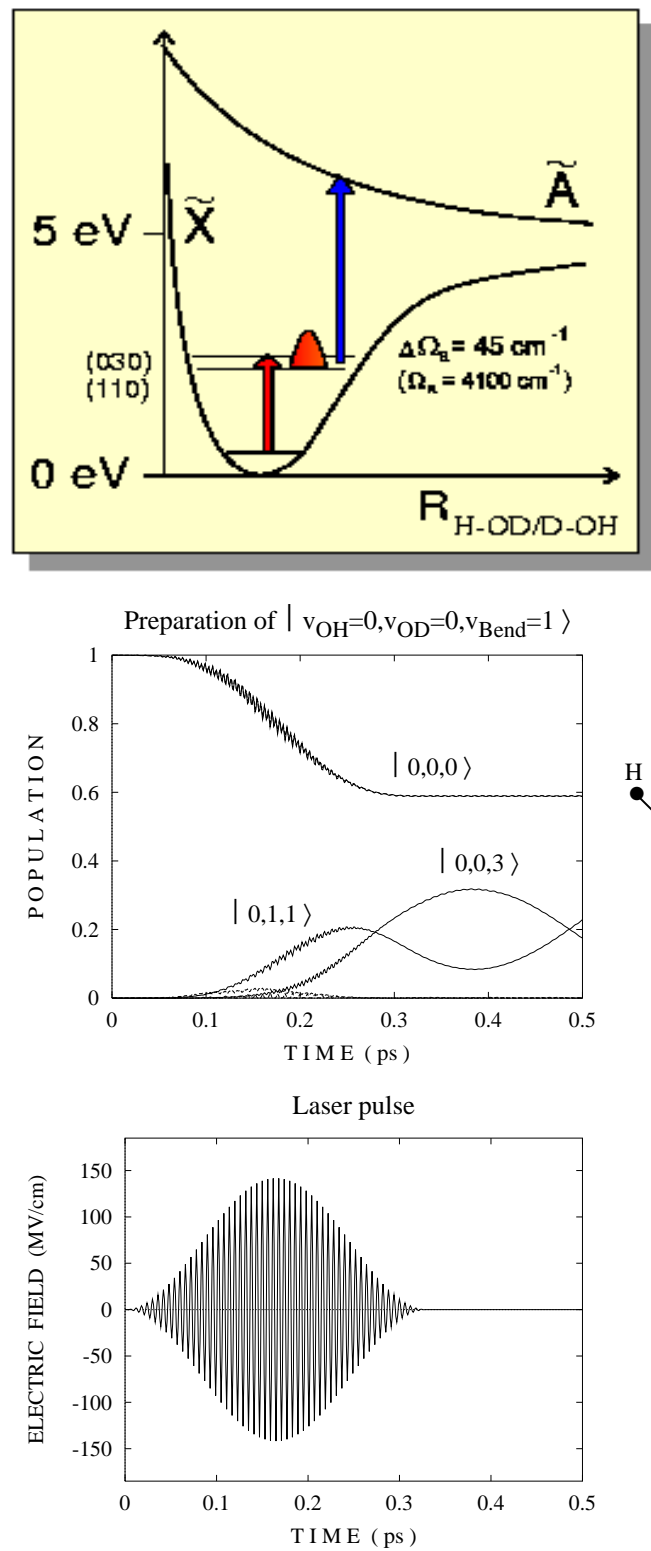
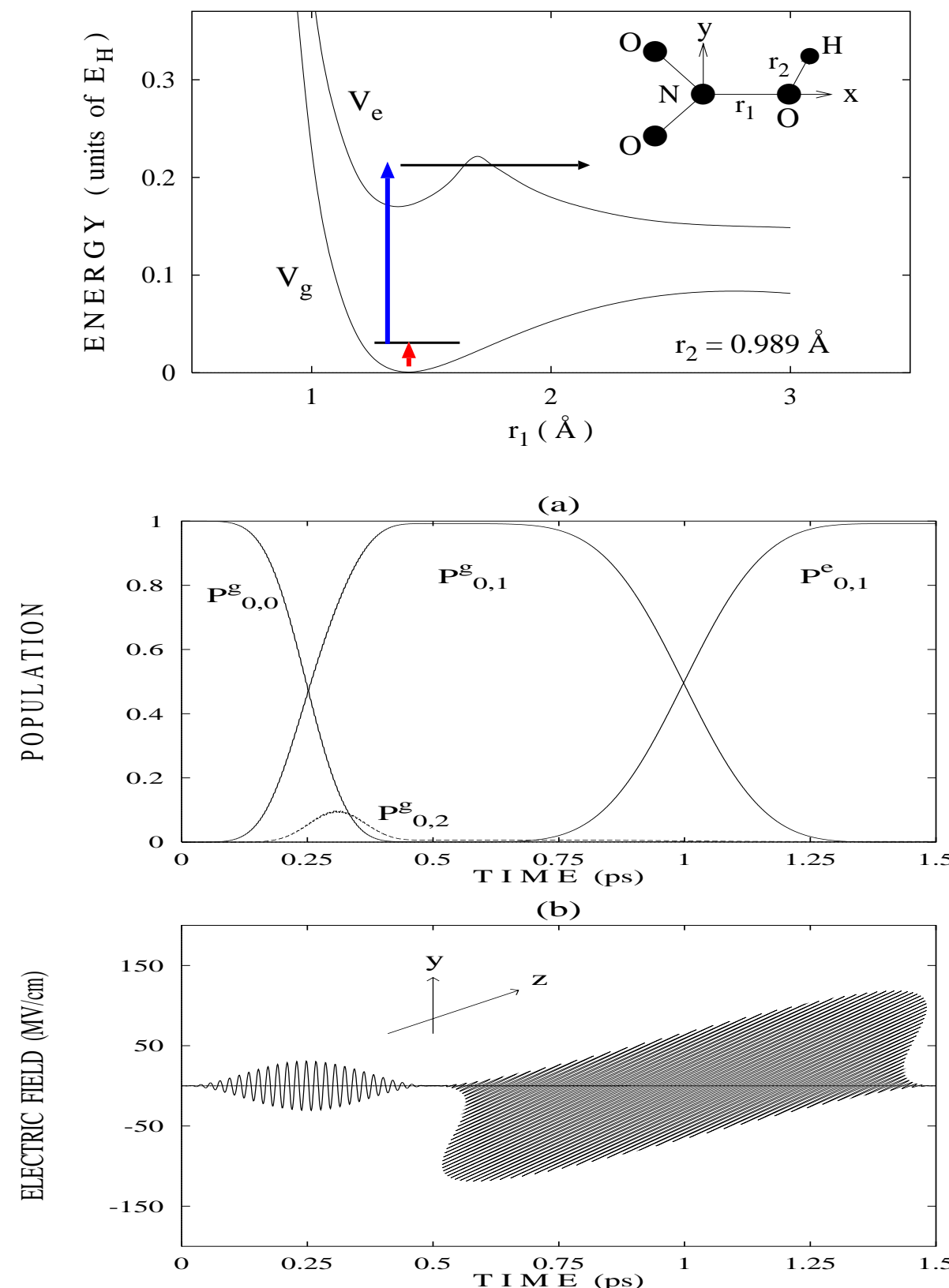


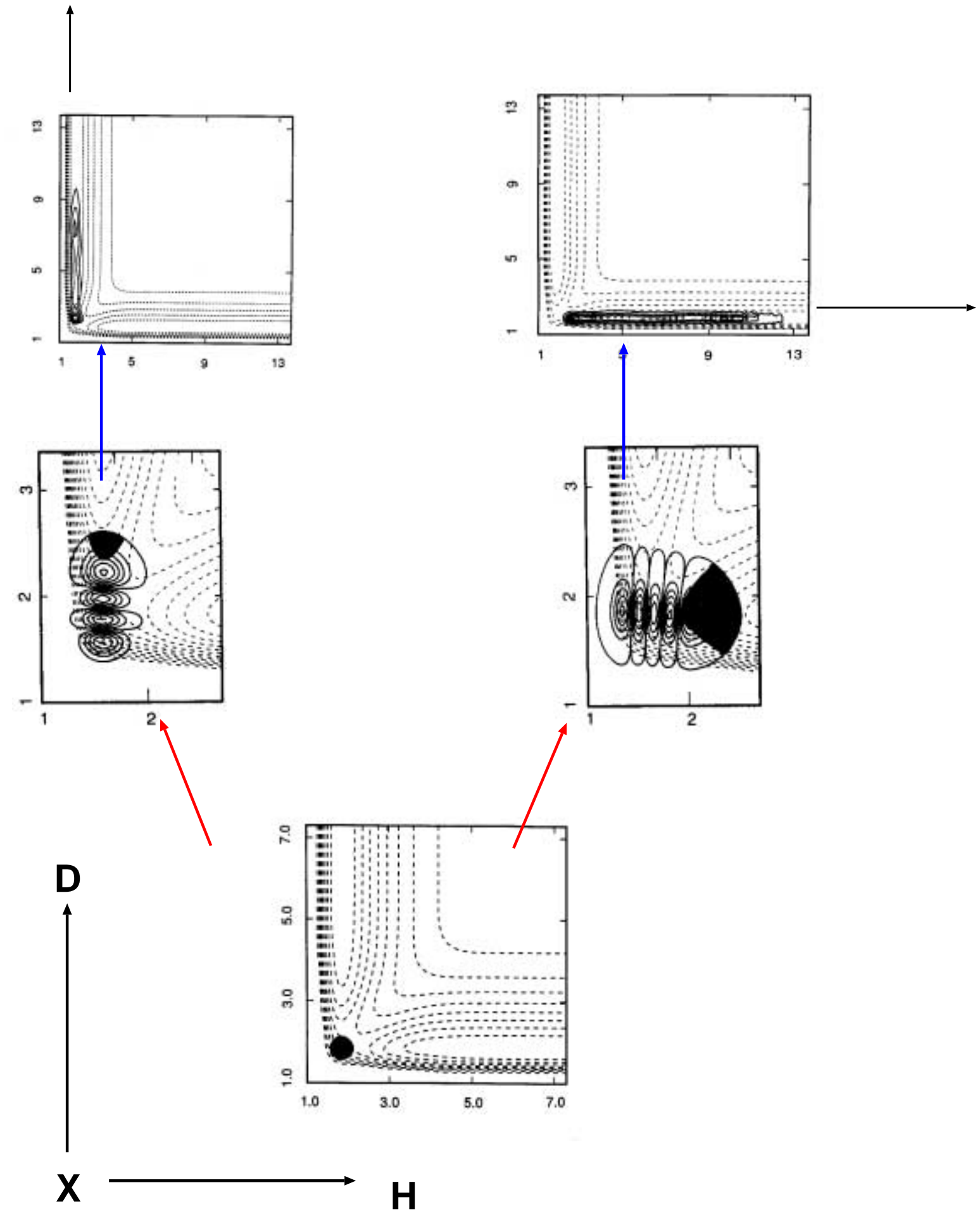
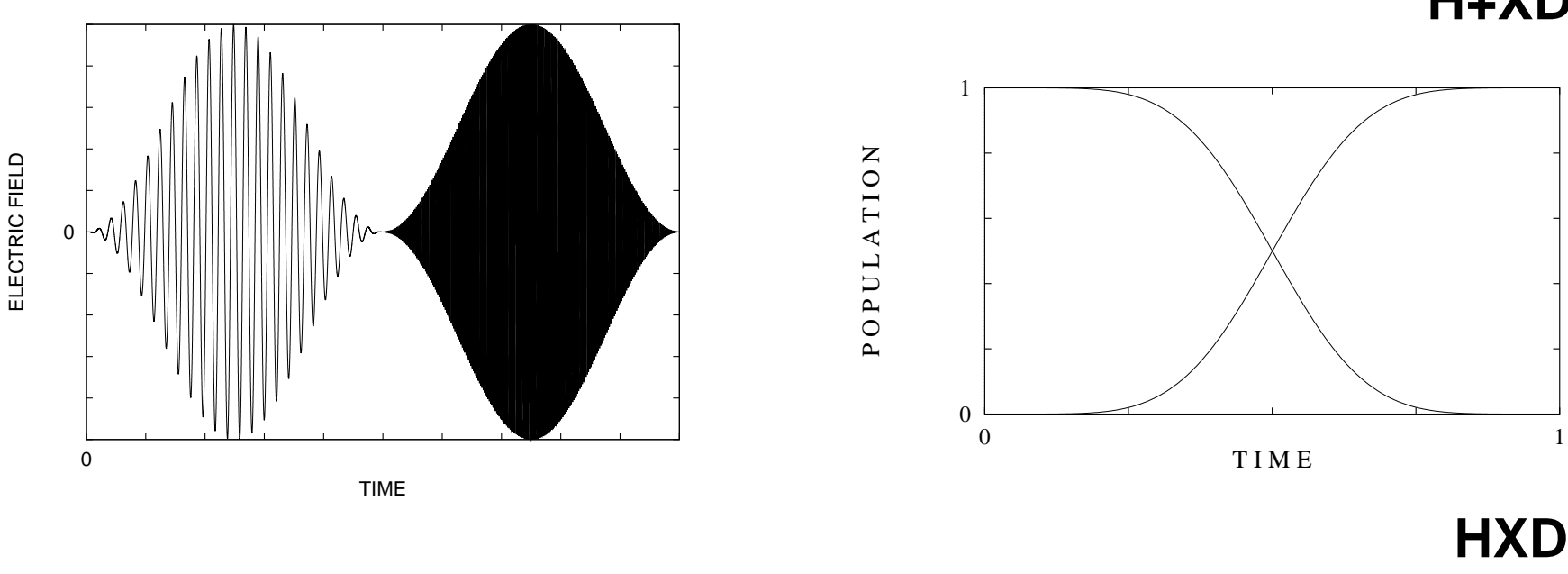
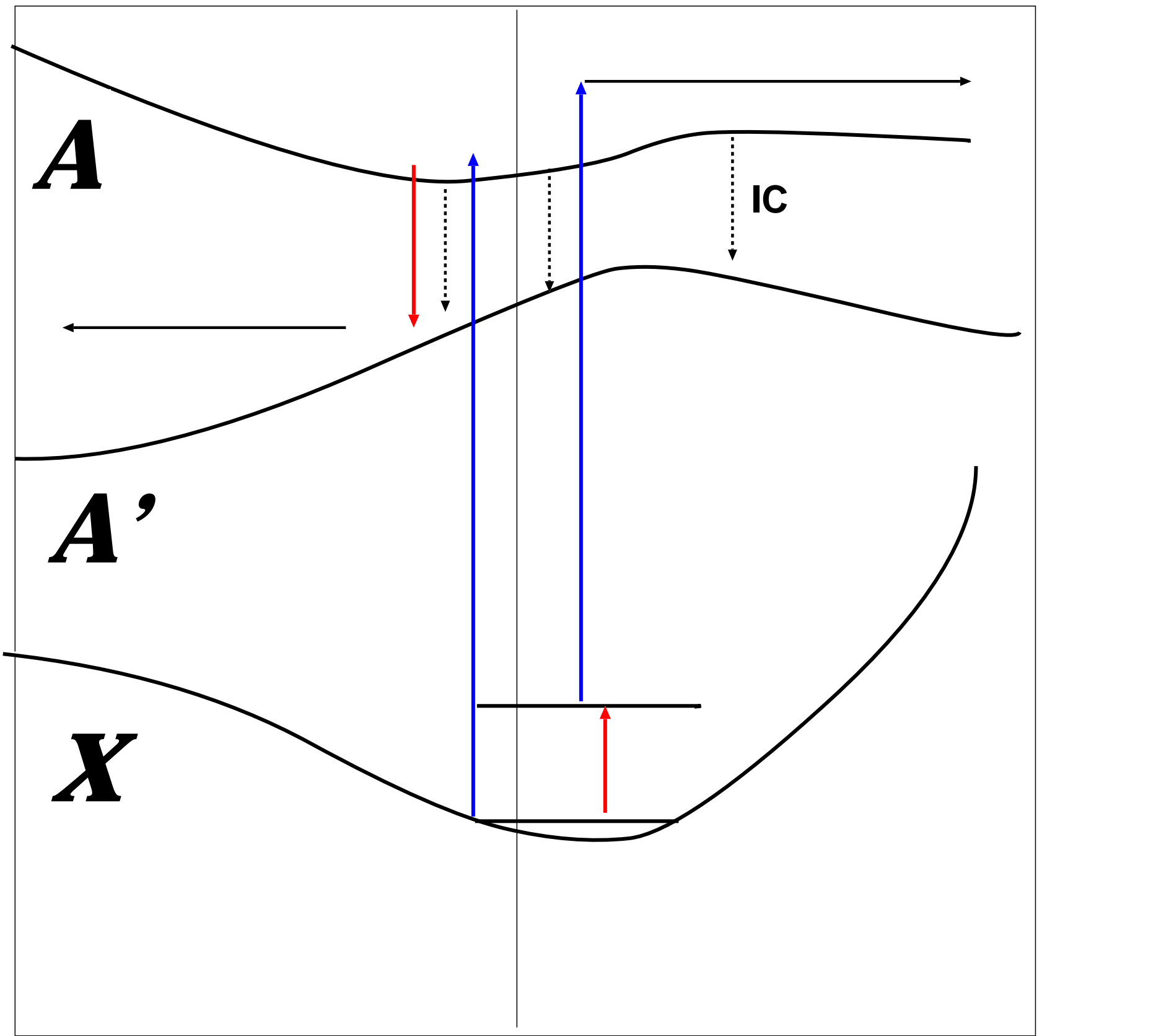
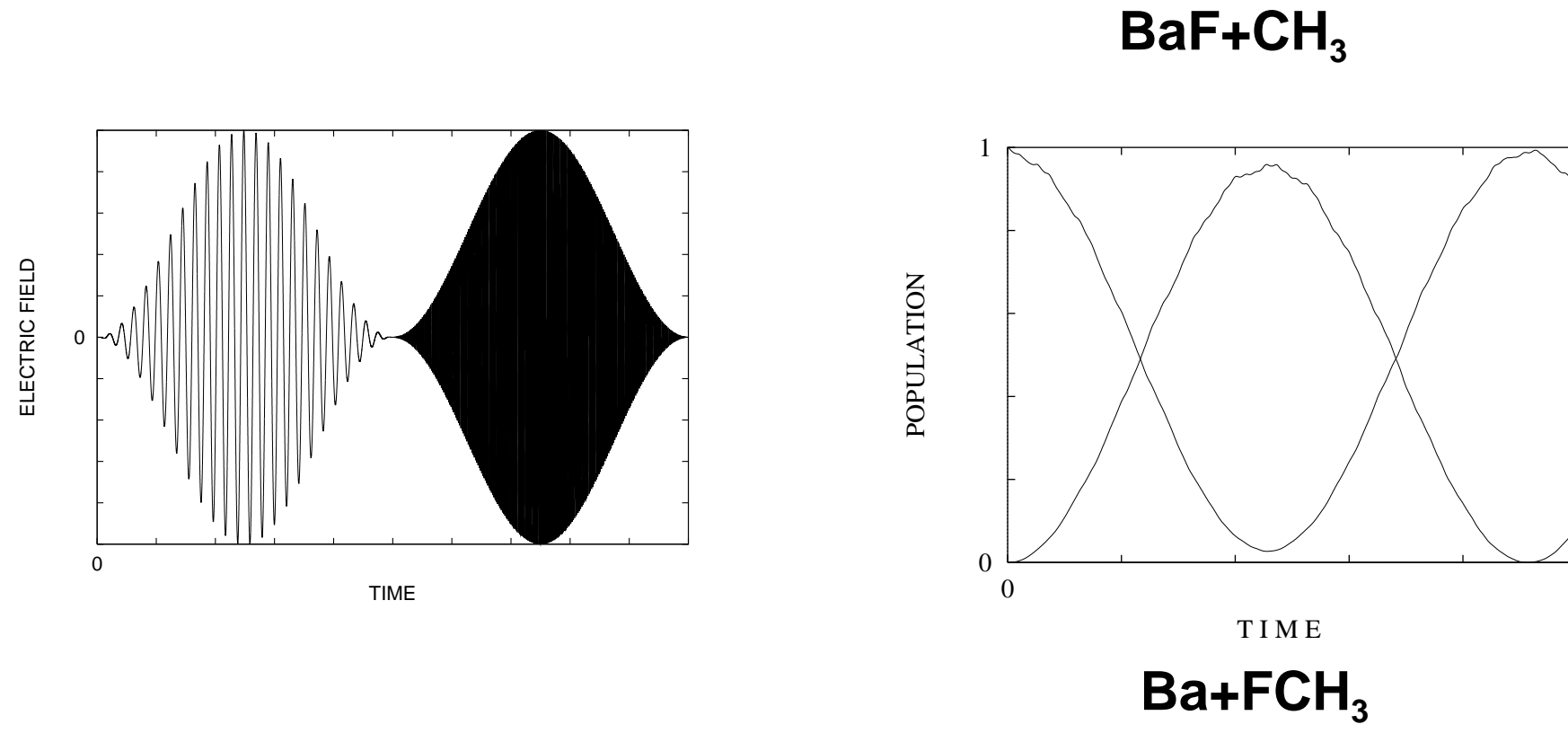
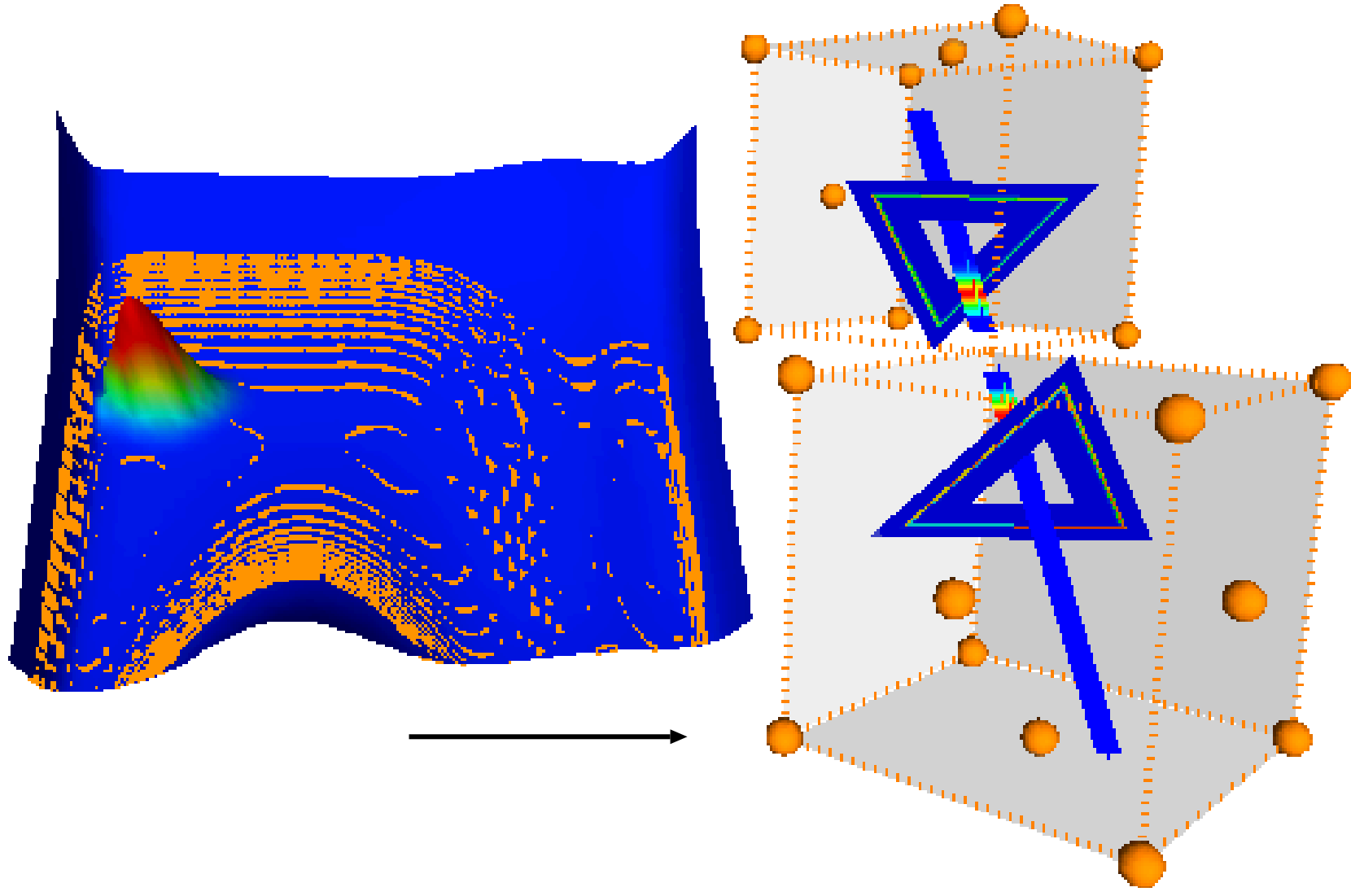
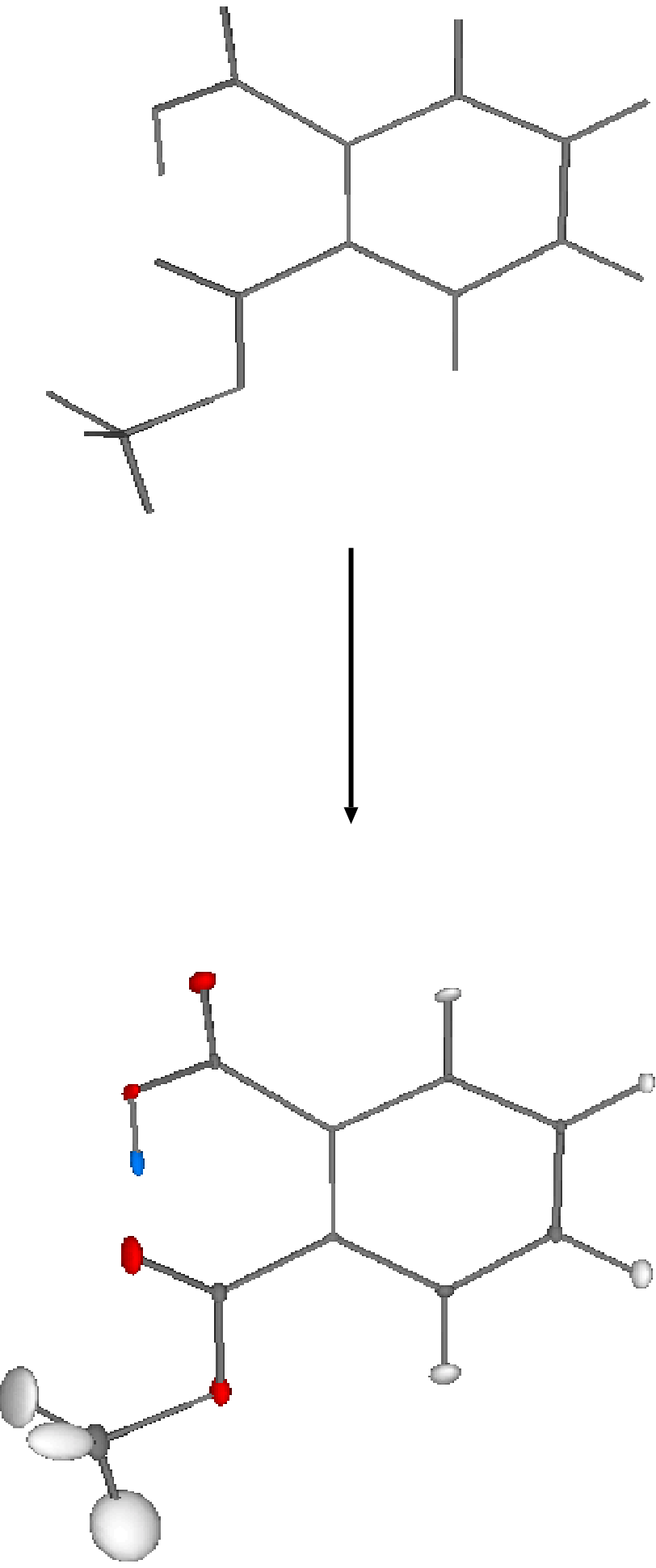
ADDITIONAL PROJECTS  
M. Oppel

<div>ABC</div> <div></div> <div>COOPERATIONS</div> <div>TP A2 (Hertel/Korn) G.K. Paramonov (Minsk) M.V. Korolkov (Minsk)</div>	<div>BaFCH<sub>3</sub></div> <div></div> <div>COOPERATIONS</div> <div>TP A4 (Radloff/Schulz) H.-H. Ritze (MBI) G.K. Paramonov (Minsk) M.V. Korolkov (Minsk)</div>	<div>Simulation and Visualisation</div> <div></div> <div>COWORKERS</div> <div>M. Dahlmann N. Elghobashi P. Krause Ch. Salzmann</div>
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RESULTS

<div>HOD</div> <div>IR+UV Excitation</div> <div></div>	<div>HONO<sub>2</sub></div> <div>IR+UV Excitation</div> <div></div>	<div>Visualising molecular quantum dynamics</div> <div><p>Molecular wavepackets <math>\Psi(\vec{q}, t) \rightarrow</math> molecular quantum dynamics <math>\rho(x_i, y_i, z_i, t)</math></p><p>intramolecular coordinates <math>\vec{q} \rightarrow</math> nuclear cartesian coordinates <math>\vec{R}</math></p><p><math>\Psi(\vec{q}) \rightarrow \Phi(\vec{R}) = \Psi(\vec{q} \vec{R}))</math></p><p><math>\rho(\vec{q}) =  \Psi(\vec{q}) ^2 \rightarrow \rho_i(x_i, y_i, z_i, t) = \int \int \int dX_1 dY_1 dZ_1 \dots dX_{i-1} dY_{i-1} dZ_{i-1} dX_{i+1} dY_{i+1} dZ_{i+1} \dots dX_n dY_n dZ_n \rho(\vec{q} \vec{R})</math></p></div>
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FUTURE

<div></div> <div>HXD=HOD, HBeD,...</div> <div>IR-excitation of: - eigenstates - zero order states - coherent states</div> <div></div> <div>H+XD</div> <div>HxD</div>	<div></div> <div><math>Ba + FCH_3 \leftarrow Ba \cdots FCH_3 \rightarrow BaF + CH_3</math></div> <div></div> <div>BaF+CH<sub>3</sub></div> <div>Ba+FCH<sub>3</sub></div>	<div>Example: laser driven cage exit</div> <div></div> <div>Example: laser driven hydrogen transfer</div> <div></div>
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