Evidence for H atom tunneling during N-H bond cleavage

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The ability to understand the complicated dynamics in molecular systems is of considerable interest, since it opens a door for controlling molecular processes. It is demonstrated that by monitoring the outcome of the interaction of photons with molecules a mechanistic insight on H atom tunneling, during N-H bond breaking in methylamine (CH_3NH_2) and methylamine- d_3 (CD_3NH_2), can be obtained.