REMPD SPECTROSCOPY OF PROTONATED PAHs FROM THE DISCHARGE SOURCE.

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Protonated polycyclic aromatic hydrocarbons (p-PAH) are predicted to have a few isomers due to multiple protonation sites, but this has yet to be verified experimentally. p-PAHs are viable candidates for being the carriers of the diffused interstellar bands. Resonance Enhanced Multiphoton Dissociation (REMPD) spectra of p-PAHs produced in a longitudinal discharge molecular beam source have been investigated, where the REMPD products were detected with reflectron TOF mass spectrometer.