RESOLVING THE NEW CHEMICALLY-ACTIVE OUTFLOW HH114

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Chemically-active protostellar outflows provide unique laboratories to study shock chemistry in relatively simple physical environments. However, only a small handful of these types of sources are currently known. Recently, Tafalla & Hacar (2013) discovered a chemically-active outflow HH114. Images obtained with the IRAM 30m Telescope revealed strong emission in SiO, HCO^+, HCN, CH_3OH, and CS in the redshifted and blueshifted lobes. Here we present SMA observations resolving the blue-shifted outflow of HH114. Leveraging the new wideband capabilities of the SMA, these new high-resolution maps reveal the rich chemistry displays complex morphologies coming from the shocked bullets and processing jet. We discuss the implications these observations can have on our understanding of shocked molecular outflows.