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[42.01] High-Resolution X-Ray Spectroscopy of Zeta Puppis and Eta Carinae with the RGS on XMM

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We present high-resolution X-ray spectra of massive stars Zeta Puppis and Eta Carinae obtained with the Reflection Grating Spectrometer (RGS) onboard the XMM/Newton observatory. The spectrum of Zeta Puppis has many emission lines, including bright, broad hydrogenic and helium-like lines from oxygen and nitrogen. Analysis of these lines indicates a plasma density of at least 10^{10} \rm{cm}$^{-3}$. The spectrum of Eta Carinae is dominated by the bright hydrogenic nitrogen line. We will present the analysis of the spectra and discuss implications.

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