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Search for Physics Beyond the Standard Model at the Jefferson Lab Eta Factory. IGAL JAEGLE, Thomas Jefferson National Accelerator Facility, GLUEX COLLABORATION — The Hall D Jefferson Lab Eta Factory (JEF) will collect data with the GlueX apparatus and an upgraded Forward Calorimeter (FCAL-II), which consists of a 1 m² PbWO₄ crystal insert in the central region of the existing FCAL. The JEF Beyond the Standard Model (BSM) physics program will search for sub-GeV dark gauge bosons (vectors, scalars, axion-like pseudo-scalars) up to 1 GeV/ c^2 in the η and η' decays or direct photoproductions. Some of the JEF BSM search channels and the experimental sensitivities will be discussed.

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