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Shanna Nicole Dobson* (sdobson@calstatela.edu), 5151 State University Drive, Los Angeles, CA 90039. *Crystalline Topos and the Profinite Completion of the Adic Fargues-Fontaine Curve*. Preliminary report.

We interpret Gaitsgory and Arinkin's notions of crystals and cohomological support of coherent sheaves on a locally complete intersection scheme as a profinite completion of the adic Fargues-Fontaine Curve, where the perfectoid field Cb is replaced by a perfectoid space S of characteristic p . Using the result that the category of crystals is equivalent to that of D -modules, we formulate a pro-crystalline topos, where crystals on X are quasi-coherent sheaves on the de Rham prestack X_{dR} . (Received October 09, 2019)