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Semantic association of astronomical images with natural language

I will present a multi-modal model that associates astronomical observations imaged by the Hubble Space Telescope with natural language. I will show that the model embodies a meaningful joint representation between the highly-domain-specific images and text using a variety of downstream tasks. The model demonstrates the potential of using generalist rather than task-specific models in parts of the traditional research pipeline, in particular by leveraging text as an interface.

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Track Classification: Direct LLM research use in fundamental physics