

Abstract Submitted  
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**Tackling the single molecule counting problem**<sup>1</sup> STEVE PRESSÉ,  
Indiana University - Purdue University Indianapolis — Protein-protein interactions – that give rise to spatiotemporal organization in the cell – are the basis for most biological information processing and cellular control. Quantitatively understanding these interactions is an essential prerequisite for developing mechanistic models of cell biology. However, there is currently no routine answer to “how many proteins of type X are in this complex?” in living cells. Here we discuss methods developed in our group (Geoff Rollins, Kostas Tsekouras) for tackling this “single molecule counting problem” starting from photobleaching data and data from a superresolution microscopy technique called PALM (PhotoActivated Localization Microscopy).

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