Abstract Submitted for the DNP19 Meeting of The American Physical Society

On the inverse problem of obtaining parton distribution functions from lattice  $QCD^1$  KOSTAS ORGINOS, College of William & Mary — Computations of parton distribution functions (PDFs) of hadrons form first principles represent an important challenge for lattice QCD. Recent theoretical developments, have identified a class of hadronic matrix elements that in principle provide access to the desired PDFs. However, accessing the PDFs requires solving an ill-defined inverse problem. In this talk I will discuss methods that allow us to address that problem and compare several of the available options.

<sup>1</sup>This work has been supported by the U.S. Department of Energy through Grant Number DE- FG02-04ER41302, and through contract Number DE-AC05-06OR23177, under which JSA operates the Thomas Jefferson National Accelerator Facility. Computations were performed at ORNL, NERSC, JLab and the WM Sci-Clone cluster.

Kostas Orginos College of William & Mary

Date submitted: 24 Jul 2019

Electronic form version 1.4