Slobodan Perovic (Belgrade), Egalitarian Paradise or Factory Drudgery? Organizing Knowledge Production in High Energy Physics (HEP) Laboratories

The organization of cutting-edge HEP laboratories has evolved in the intersection of academia, state agencies, and industry. Exponentially ever-larger and more complex knowledge-intensive operations, the laboratories have often faced the challenges of, and required organizational solutions similar to, those identified by a cluster of diverse theories falling under the larger heading of organization theory. The cluster has either shaped or accounted for the organization of industry and state administration. The theories also apply to HEP laboratories, as they have gradually and uniquely hybridized their principles and solutions. Yet scholarship has virtually ignored this linkage and has almost exclusively focused on the laboratories' presumably unique egalitarian organizational aspects. Guided by the principles developed in the organization theory cluster, we identify the basic organizational features of HEP laboratories in relation to their pursuit of narrow and broad epistemic goals. We also provide a set of criteria and methods for assessing the efficiency of the identified organizational features in achieving such goals.