

The history of lattice field theory from a statistical perspective

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Researchers working in lattice field theory constitute an established community since the early 1990s, and around the same time the online open-access e-print repository arXiv was created. The fact that this field has a specific arXiv section, hep-lat, provides a unique opportunity for a statistical study of its evolution over the last three decades.

We present data for the number of entries, E, published papers, P, and citations, C, in total and separated by nations. We compare them to 6 other arXiv sections, (hep-ph, hep-th, gr-qc, nucl-th, quant-ph, cond-mat), and to socio-economic indices of the nations involved, namely the Gross Domestic Product (GDP) and the Education Index (EI).

We present rankings, which are based either on the Hirsch Index H, or on the linear combination $\text{Sigma} = E + P + 0.05 C$. We consider both extensive and intensive national statistics, i.e. absolute and relative to the population or to the GDP.

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