All mathematically stable configurations in an otherwise uniform energy field

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Abstract

Studying series with particular properties which could help understand physical phenomena has always coupled the elegant mathematical beauty of number theory with the mysterious physical reality of the cosmos. Looking at differences of ratios of series and studying their general behaviour, it is possible to arrive at certain results about stabilities of structures, that are monitored by the series, in a uniform isolated energy field that preserves homogeneity and isotropy. If not for this mathematically induced stability, such structures would not form for they would spontaneously collapse and disintegrate otherwise.

Firstly, the physics motivation will be mentioned, followed by a brief note on the question asked and the intuition that it entails. Then an outline of the proof will be presented with an endnote on further research interests that may follow.