Decreasing Plasma Instabilities in Stellar Evolution

Jeffrey J Wolynski
Jeffrey.wolynski@yahoo.com
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Cocoa, FL 32922

Abstract: A simple principle is provided to explain that plasma instabilities decrease as stars age and cool.

Young, hot stars are comprised of plasma. Their energetic nature gives rise to plasma behaving very unlike anything in gaseous, liquid or solid form. Plasma instabilities dominate young stars, and as they cool, the instabilities diminish. The plasma becomes genuinely neutral matter, not averaged out neutral. Averaged out neutral means they are looked at as not being charged objects, regardless if young stars are comprised of mostly positive and negative ions. As the plasma recombines to gas, the plasma/gas mixture is less subject to electromagnetic forcing, and the turbulent nature of the star diminishes. As the instabilities diminish, the matter can then begin to sort out based on multiple properties and characteristics. To state clearly for the reader, young stars are too unstable to have any coherent process powering them. Young stars are not differentiated and organized, they are roiling balls of plasma many times the diameter of Earth as well as vastly younger. The whole fad of young stars being organized was a gross misinterpretation of the facts of nature. It takes hundreds of millions of years for a star to organize itself, it just doesn't go *poof* it is now a nuclear reactor because we said so!

"Plasma instabilities decrease as stars evolve."

This means older stars will not have super energetic plasma being ejected from its surface. The older plasmatic stars will be much more calm, meaning the rate of flaring will decrease.