

Review of: "The Milky Way Radial Metallicity Gradient as an Equilibrium Phenomenon: Why Old Stars are Metal-Rich"

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Potential competing interests: No potential competing interests to declare.

Referee report on the paper entitled "The Milky Way Radial Metallicity Gradient as an Equilibrium Phenomenon: Why Old Stars are Metal-Rich", by J. W. Johnson et al.

This is an interesting work that explains metallicity gradients by a combination of efficiency of outflows and external gas infall. It is very complete in citations and can be a useful reference as a review in the field. The paper is very well-written, and can be accepted as it is.

Major comment:

The APOGEE survey is adopted as the basis of this work. I would only call the attention to uncertainties in the metallicity of super-metal-rich stars in this survey. Although this is not described clearly in papers, there is some evidence in the literature for this overestimation of high metallicities, in particular in terms of $[O/H]$, since it is expected to have low $[O/Fe]$ values for $[Fe/H]>0$. Please add a comment on this.

Minor corrections:

page 3, first column, last paragraph, line 15: Gyr timsca