Review of: "Einstein-AdS gravity coupled to nonlinear electrodynamics, magnetic black holes, thermodynamics in an extended phase space and Joule—Thomson expansion"

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Potential competing interests: No potential competing interests to declare.

This paper studies Einstein-AdS gravity coupled to nonlinear electrodynamics. The thermodynamics and phase transitions of magnetically charged black holes are investigated. The stability of the black hole is obtained by the Gibbs free energy and the heat capacity. Furthermore, the cooling and heating phase transitions are explored using the Joule-Thomson expansion. This novel work deserves publication and I have recommended it for minor revision.

1. The introduction is quite short. The author does not explain the motivation for studying Einstein-AdS gravity coupled to the NED. Some explanation should be added to help the reader understand the physical significance of the results.

2. Figure 4 is not clear and it would be appreciated if the author could provide a clearer figure to show the critical point.

3. The phase diagram of the black hole can be added to make the contents of the phase transition more visible.

4. The summary section should discuss the significance of the results and the wider implications.