Retraction: *In Situ* Control of Diamagnetism by Electric Current in $\text{Ca}_3(\text{Ru}_{1-x}\text{Ti}_x)_2\text{O}_7$ [Phys. Rev. Lett. **122, 196602 (2019)]**

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Following the publication of the Letter, new measurements performed in Kyoto by Mattoni, Yonezawa, and Maeno [1] led to reveal a serious technical artefact that affected our published data. In particular, it became clear that a large part of the reported diamagnetic signal was arising from a mechanism that we did not anticipate. This signal can be understood as due to localized heating of the sample holder, caused by the unavoidable Joule heating in the sample.

Because the artefact affects the main experimental data, the authors unanimously agreed to retract the Letter. For the same reason, previous work on Ca_2RuO_4 [2] has also been retracted [3]. We are profoundly sorry for having overlooked this aspect, and we explain the details of this rather unexpected phenomenon in Ref. [1].

- [1] G. Mattoni, S. Yonezawa, and Y. Maeno, *Appl. Phys. Lett.* **116**, 17 (2020).
- [2] C. Sow, S. Yonezawa, S. Kitamura, T. Oka, K. Kuroki, F. Nakamura, and Y. Maeno, *Science* **358**, 1084 (2017).
- [3] C. Sow *et al.* *Science* **368**, 376 (2020).