Erratum: New metrics of a spherically symmetric gravitational field passing classical tests of general relativity

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In the original paper, the authors presented several metrics of a spherically symmetric gravitational field passing classical tests of general relativity. They mistakenly claimed that these metrics do not satisfy Einstein’s field equations. In fact, however, they have shown that all of these metrics do satisfy Einstein’s field equations.

They also discovered that their analytic metric (formula (33)) coincides with the Schwarzschild metric in Eddington-Finkelstein coordinates [1,2]. However, the interpretation of the coordinates in their model and in the Eddington-Finkelstein are different.

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References

[1] Eddington A. S., Nature, 113 (1924) 2832.
[2] Finkelstein D., Phys. Rev., 110 (1958) 965.