

COMMENT

## Stationary cylindrically symmetric vacuum solutions with $\Lambda$

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**Abstract.** The solutions recently published by Santos were found by this author in 1975.

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The author of [1] found a complete set of solutions of the Einstein equations under the following assumptions.

- (1) The metric is stationary and cylindrically symmetric.
- (2) The source term in the Einstein equations is just the cosmological term.

The definition of the task is exactly the same as in [2, 3] (section 9 in [2] contains a detailed derivation and presentation, [3] contains a short description of the solutions). The results of [1] must thus be equivalent to those of [2, 3] under a coordinate transformation. A positive confirmation of this statement is left as an exercise for the reader.

### References

- [1] Santos N O 1993 *Class. Quantum Grav.* **10** 2401
- [2] Krasinski A 1975 *Acta Phys. Polon.* **B 6** 223
- [3] Krasinski A 1975 *J. Math. Phys.* **16** 125

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