Erratum to: A boundary value problem for a nonlinear elliptic system relevant in general relativity

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In the original paper some of the components of the stress-energy tensor and of the Ricci tensor are wrong.

On page 217 formula (1.4) must be changed as follows:

$$T_{ik} = \frac{1}{4\pi} \left[F_{ij} F_k^j - \frac{1}{4} g_{ik} F_{cd} F^{cd} \right]$$

On page 218 the text from line 1 to line 5 must be changed as follows: for the non vanishing components of T_{ik} we have

$$T_{00} = \frac{1}{8\pi} e^{2\psi-2\gamma} (\phi_\rho^2 + \phi_z^2), \quad T_{11} = \frac{1}{8\pi} e^{-2\psi} (\phi_z^2 - \phi_\rho^2), \quad T_{12} = -\frac{1}{4\pi} e^{-2\psi} \phi_\rho \phi_z,$$

$$T_{22} = \frac{1}{8\pi} e^{-2\psi} (\phi_\rho^2 - \phi_z^2), \quad T_{33} = \frac{1}{8\pi} \rho^2 e^{-2\psi-2\gamma} (\phi_\rho^2 + \phi_z^2).$$

On page 218 the text from line 8 to line 12 must be changed as follows:
For the non vanishing components of the Ricci tensor we have

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$$R_{00} = e^{4\psi-2\gamma}A(\psi), \quad R_{11} = A(\psi) - A(\gamma) - 2\psi_z^2$$

$$R_{12} = \frac{1}{\rho}\gamma_z - 2\psi_\rho\psi_z, \quad R_{22} = A(\psi) - A(\gamma) + \frac{2}{\rho}\gamma_\rho - 2\psi_\rho^2, \quad R_{33} = \rho^2e^{-2\gamma}A(\psi).$$

On page 218 the line 4 from below must be changed as follows:
 From the Einstein's equation $R_{33} = 8\pi T_{33}$ we obtain the equation