The Force Equations

$$\underline{\nabla} \cdot \underline{F}(spin) = m_1 m_2 G \tilde{j}^0$$

$$\underline{\nabla} \times \underline{F}(orbital) + \frac{1}{c}\frac{\partial \underline{F}}{\partial t}(spin) = m_1 m_2 G \underline{\tilde{j}}$$

$$\underline{\nabla} \cdot \underline{F}(orbital) = m_1 m_2 G J^0$$

$$\underline{\nabla} \times \underline{F}(spin) - \frac{1}{c}\frac{\partial \underline{F}}{\partial t}(orbital) = m_1 m_2 G \underline{J}$$

$$\underline{F}(orbital) = m_1 m_2 G \left(R^0{}_1{}^{01}\underline{i} + R^0{}_2{}^{02}\underline{j} + R^0{}_3{}^{03}\underline{k} \right)$$

$$\underline{F}(spin) = m_1 m_2 G \left(R^2{}_3{}^{23}\underline{i} + R^1{}_3{}^{31}\underline{j} + R^1{}_2{}^{12}\underline{k} \right)$$

These are deduced from the second Cartan structure equation:

$$R^a{}_b = D \wedge \omega^a{}_b$$

and the second Bianchi identity:

$$D \wedge R^a{}_b := 0$$

for a spherically symmetric spacetime.