

Abstract Submitted  
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**Other Questions with Respect to the Weak Equivalence Principle**

FLORENTIN SMARANDACHE, Univ of New Mexico — A disc rotating at high speed will exert out-of-plane forces resembling an accelerating field. Is the principle of equivalence also applicable for this process? Will someone inside an elevator in free-fall and rotating around its vertical centre, feel a gravitational force? Or will he feel a gravitational force larger than what equivalence principle requires? Does the equivalence principle remain applicable here? An airplane flies at an altitude of 1 km. The co-pilot drops an elevator-room without a passenger inside it. After one second has elapsed, the co-pilot drops four grenades in the direction of the freely-falling elevator's path. The question: Will the grenades reach the elevator before it reaches the ground? If no, why? If yes, which grenade? How will the air resistance influence the outcome?

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