

Ten people are seated at a circular table at a restaurant. Each of them has ordered an item from the menu, and when the food is ready the 10 items are placed on a rotating platform in the centre of the table. It happens that when the food is initially placed nobody has the meal which they ordered in front of them. Show that (if everybody remains in his/her own seat and nobody touches the food) by rotating the platform it is possible to find a position in which at least two people have the correct meal in front of them.