

TELEFAX AS FORERUNNER OF TELEPORTATION

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The classical approach of teleportation means that an object or person which was physically present in one place, is made to appear somewhere else, or his identical replica is made. The telefax is a good example of something similar to teleportation.

Until recently quantum teleportation was considered impossible because it was thought to violate quantum mechanics' *Uncertainty Principle (Heisenberg principle)*, which forbids any form of measuring or scanning to extract all the information in an object. According to Heisenberg, the more accurately an object is scanned, the more it is disturbed by the scanning process, until the object's original state has been completely altered, without having extracted enough information to build a replica.

Another feature of quantum mechanics, however, gives hope to future teleportation engineering: Thanks to the *Einstein-Podolsky-Rosen (EPR) effect* or entanglement we may not have to say goodbye to teleportation as fax machine re(e)volution after all.