Some Recent Advances & Open Problems on Perturbations and Extensions of Isometric Operators

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In this talk, some recent advances & open problems on perturbations and extensions of isometric operators are presented. For example, on the "strong-stability problem for the linear isometries" we obtain some posivive results on the spaces $B(E_(2), L(m)), B(E_{(n)}, C(K)), B(L^{(\infty)}, (m))$ and $B(X, L^{(\infty)})$ (where X is uniformly smooth with $dimX = 1$ or ∞) but what about for the space $B(L^{(p)}, C(K))$? And on the "extension problem of isometry between the unit spheres of two Banach spaces" we obtain some posotive results on the spaces $B(H), B(l^{(p)})$ and $B(E, C(K))$ but what about for the isometry which is defined the sphere of E "into" (not "onto") the sphere of F? etc.