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***Fixed points of demicontinuous nearly Lipschitzian mappings  
in Banach spaces***

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**Abstract:** We introduce the classes of nearly contraction mappings and nearly asymptotically nonexpansive mappings. The class of nearly contraction mappings includes the class of contraction mappings, but the class of nearly asymptotically nonexpansive mappings contains the class of asymptotically nonexpansive mappings and is contained in the class of mappings of asymptotically nonexpansive type. We study the existence of fixed points and the structure of fixed point sets of mappings of these classes in Banach spaces. Our results improve various celebrated results of fixed point theory in the context of demicontinuity.

**Keywords:** asymptotically nonexpansive mapping, Banach contraction principle, fixed point, Lipschitzian mapping, nearly Lipschitzian mapping, nearly asymptotically nonexpansive mapping, uniformly convex Banach space

**AMS Subject Classification:** 47H10, 47H15, 47H09, 47H17, 65J15