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# ON THE SPECTRUM OF THE POINCARÉ OPERATOR IN ELLIPSOIDS

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The Poincaré equation describes the motion of an incompressible fluid in a domain submitted to a rotation. The associated wave operator is called the “Poincaré operator”. If the domain is an ellipsoid, it was observed by several physicists that the spectrum is pure point with polynomial eigenfields. I will give a conceptual proof of this fact and an asymptotic result on the eigenvalues.