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Andrew Donald and **Faramarz Vafaee*** (vafaee@caltech.edu), 1200 East California Blvd., Pasadena, CA 91125. *A Slicing Obstruction From The 10/8 Theorem.*

A smooth slicing obstruction for knots in S^3 can be derived from Furuta's 10/8 theorem using spin 4-manifold whose boundary is 0-surgery on a knot. We show that this obstruction is able to detect torsion elements in the smooth concordance group and find topologically slice knots which are not smoothly slice. (Received August 11, 2015)