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**Halyun Jeong\*** (hajeong@math.ubc.ca), , Canada, and **Kateryna Melnykova** and **Ozgur Yilmaz**. *Iterative re-weighted Kaczmarz algorithm for compressed sensing*. Preliminary report.

The main goal of compressed sensing is to recover a sparse signal from a few linear measurements. In this talk, a new iterative algorithm for such sparse recovery problems is proposed. The new method uses weighted Kaczmarz updates and thus it is applicable for big data. We provide extensive numerical comparison of the new algorithm with the iterative re-weighted least squares and the iterative hard thresholding. (Received September 17, 2019)