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**GW+exact diagonalization approach for electronic structure calculations in Mott insulators** NIKOLAY ZEIN, RRC “Kurchatov Institute”, Moscow, SERGUIE SAVRASOV, UC Davis, CA, GABRIEL KOTLIAR, Rutgers University, NJ — We combine GW and exact diagonalization approaches to calculate electronic structure both in antiferromagnetic and paramagnetic states and find parameters of the corresponding Hubbard model in several transition metal oxides. We discuss extraction of double counting terms, renormalization of one-particle spectrum and interaction, mutual influence of Hubbard-like and GW contributions. Results are compared with LDA+DMFT calculations and the importance of self-consistent approach is stressed

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