$\begin{array}{c} \textbf{Extracting chemical information from molecular}\\ \textbf{wave functions} - \textbf{some recent results} \end{array}$

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In the lecture I am going to summarize our recent results obtained for *a posteriori* analyzing molecular wave functions in chemical terms. The topics will cover

- Bond order index: improved definition for correlated wave functions and calculating from results of plane wave calculations;
- Effective atomic orbitals and effective minimal basis sets: calculations in different theoretical frameworks;
- An improved energy-partitioning scheme.