non-rel. Schrödinger equation
or relativistic Dirac equation

LDA or GGA
or hybrids

physical orbitals or not
mesh density and basis set

$$\left(-\frac{\hbar^2}{2m} \vec{\nabla}_{\vec{r}}^2 + v_{\text{ext}}(\vec{r}) + v_H(\vec{r}) + v_{xc} \right) \phi_i(\vec{r}) = E_i \phi_i(\vec{r})$$

pseudopotential
(ultrasoft/PAW/norm-conserving)
or all-electron

Hartree potential
from solving Poisson eq.
or integrating charge density

view EVs as mere Lagrange
multipliers or band structure approx