

## Concluding Remarks & Outlook

- Vacuum-assisted photoionization is discussed as a novel photoionization process at relativistic energies (MeV energies and beyond).

- Basic mechanisms:  $g$  converts into an  $e^+e^-$  pair in the

1.

Nuclear field and, subsequently, bound  $e^-$  is emitted through binary encounter

2.

Electron field and the bound  $e^-$  takes enough recoil to be liberated.

- The most probable way of photoionizing an atom at high energies is to make the QED-vacuum spark.

More detailed investigations of

- electron binding effects
- correlation effects

around threshold are needed ...