

*We insist on our purpose of getting an unified study of EM elastic and transition form factors of nucleon resonances using QCD-kindred kernels and interaction vertices*

## Present activities:

- **The  $\gamma^* N \rightarrow N(1535)_{\frac{1}{2}}^-$  reaction.** Viewed as chiral partners, their mass and structural differences can be attributed to dynamical chiral symmetry breaking.
- **The  $\gamma^* N \rightarrow N(1710)_{\frac{1}{2}}^+$  reaction.** There is a second two-node solution to the Nucleon's Faddeev equation which is challenging the limits of our approach.
- **The  $\gamma^* N \rightarrow N(1520)_{\frac{3}{2}}^-$ ,  $N(1700)_{\frac{3}{2}}^\pm$  reactions.** Description of orbital angular momentum excitations within Poincaré covariant quantum field formalism.

## Future activities:

- Extension of previous studies to the  $l = 3/2$  sector, with particular interest on  $\gamma^* N \rightarrow \Delta(1700)_{\frac{3}{2}}^-$  which is the parity partner of the  $\Delta(1232)$ .
- Study of structure functions from the computation of light-front wave function of mesons and baryons, using QCD-kindred kernels and interaction vertices.
- Exploration of the  $N \rightarrow N^*$ ,  $\Delta^*$  GPDs, the  $t$ -dependence can currently be determined through transition FFs but also their  $x$ -dependence can be accessed.