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Memo CP-D/691

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To: Distribution
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Subject: **Dictionary 236 (Quantity codes) - ,SIG,,DSP**

There are 3 quantity codes defined with `SIG` and `DSP` in SF6 and SF8:

`,SIG,,DSP:`
        Cross sections (spins antiparallel - spins parallel)
`LON,SIG,,DSP:`
        Cross section difference (*longitudinal* spins, parallel – antiparallel)
`TRN,SIG,,DSP:`
        Cross section difference (*transversal* spins, parallel – antiparallel)

 "parallel" and "antiparallel" mean relation of directions between projectile spin and target spin. (It is not very clear from the expansion, but I checked all articles and confirmed it. Both projectile and target are polarized in all entries).

The first quantity code `,SIG,,DSP` is not used in any EXFOR entry, and its definition is also not clear. Probably this was defined for difference in cross sections measured with two spin direction combinations (antiparallel and parallel) on the assumption that "-" in the expansion means "minus".

However, `LON,SIG,,DSP` and `TRN,SIG,,DSP` are enough for us because there are only two possibilities - "longitudinal" and "transversal" – unless we start compilation of polarized heavy-ion induced reaction on polarized target. I propose to make `,SIG,,DSP` obsolete.

Dictionary 236 (Quantities)
`,SIG,,DSP`   *Obsolete*

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