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To: Distribution
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Subject: Data type (SF9) for data measured by indirect reaction

Data measured from indirect reaction methods (e.g. reaction data derived from a measurement of a different reaction) have been accumulated in EXFOR entries. Below are some examples of such data:

- 1) Surrogate reaction (Analysis code SURGT):
 $^{237}\text{Np}(n,f)$ data derived from $^{238}\text{U}(^3\text{He},t+f)$ measurement
- 2) Trojan horse method (Analysis code TROJA)
 $^9\text{Be}(p,\alpha)^6\text{Li}$ data derived from $^2\text{H}(^9\text{Be},\alpha+^6\text{Li})n$ measurement
- 3) Coulomb breakup (No analysis code)
 $^{14}\text{C}(n,\gamma)^{15}\text{C}$ data derived from $^{\text{nat}}\text{Pb}(^{15}\text{C},n+\gamma)^{\text{nat}}\text{Pb}$ measurement

In these data, some theoretical assumptions are used in derivation. In order to distinguish data measured by direct reaction methods by indirect reaction methods, use of a data type code DERIV (derived data) in SF9 field of REACTION codes is proposed for data measured by indirect reaction methods.

In LEXFOR “Data Type”,

“Data calculated using measurements for an inverse reaction”
is given as an example of derived data. I would propose to change this to
“Data calculated using measurements for an indirect reaction (e.g. inverse reaction, surrogate reaction)”

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