

Bibliographic Errors in EXFOR

(M. Fleming, M. Bossant, Memo CP-N/148)

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Subject: Bibliographic Errors in EXFOR

EXFOR contains many type J coded references that allow basic statistical analysis to cross-check the entries. One type of check consists of plotting comparing the volume numbers against the publication years. Outliers can then be identified and manually checked. An example is shown in Figure 1. A study by Manuel Bossant was performed by using all references within EXFOR and isolating two popular journals: Nuclear Physics A and Physical Review C. The set of all entries were compared with publication year and volume number. The set of publications is large enough that several decades of references may be identified with a complete chronological order of (year,volume) duplets. All entries that fell outside the identified set of correct bibliographic records were then identified and verified by manual inspection. These are summarised in Table 1 and Table 2.

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Table 1: Errors found in Nuclear Physics A bibliographic data in EXFOR.

Entry	Keyword	EXFOR bibliography	Suggested correction
12857.002	REL-REF	J,NP/A,143,118,1969	J,NP/A,143,118,1970
13688.001	MONIT-REF	J,NP/A,565,1,95	J,NP/A,565,1,1993
14462.001	REFERENCE	J,NP/A,,2017	J,PR/C,95,064605,2017
41541.003	REL-REF	J,NP/A,521,5,1973	J,NP/A,211,1,1973
A0340.001	MONIT-REF	J,NP/A,383,98,1985	J,NP/A,383,98,1982
A0414.001	REL-REF	J,NP/A,668,519,2001	J,NP/A,688,539,2001
A0456.005	REL-REF	J,NP/A,42,582,1963	J,NP,42,582,1963
D4035.002	MONIT-REF	J,NP/A,383,98,1985	J,NP/A,383,98,1982
D4035.003	MONIT-REF	J,NP/A,383,98,1985	J,NP/A,383,98,1982
M0373.002	REL-REF	J,NP/A,131,477,1972	J,NP/A,181,477,1972
M0374.003	REL-REF	J,NP/A,131,477,1972	J,NP/A,181,477,1972
M0635.003	REL-REF	J,NP/A,228,565,1976	J,NP/A,258,365,1976
M0635.007	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.008	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.009	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.010	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.011	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.013	REL-REF	J,NP/A,291,39,1974	J,NP/A,219,39,1974
M0635.022	REL-REF	J,NP/A,228,565,1976	J,NP/A,258,365,1976
M0635.041	REL-REF	J,NP/A,228,565,1976	J,NP/A,258,365,1976
M0648.025	REL-REF	J,NP/A,469,239,1980	J,NP/A,469,239,1987
M0653.005	REL-REF	J,NP/A,469,239,1980	J,NP/A,469,239,1987
M0856.001	REL-REF	J,NP/A,466,229(C),1985	J,NP/A,466,229(C),1987
O0002.001	REL-REF	J,NP/A,89,247,82	J,NP/A,389,247,1982
O0606.003	REL-REF	J,NP/A,A175,177,1971	J,NP/A,175,177,1971
O1125.004	REL-REF	J,NP/A,225,360,1975	J,NP/A,255,360,1975
O1181.002	REL-REF	J,NP/A,168,129,1974	J,NP/A,168,129,1971
O1181.002	REL-REF	J,NP/A,412,545,1970	J,NP/A,142,545,1970
O1181.003	REL-REF	J,NP/A,168,129,1974	J,NP/A,168,129,1971
O1181.003	REL-REF	J,NP/A,412,545,1970	J,NP/A,142,545,1970
O1181.004	REL-REF	J,NP/A,168,129,1974	J,NP/A,168,129,1971
O1181.004	REL-REF	J,NP/A,412,545,1970	J,NP/A,142,545,1970
O1181.005	REL-REF	J,NP/A,412,545,1970	J,NP/A,142,545,1970
O1181.006	REL-REF	J,NP/A,412,545,1970	J,NP/A,142,545,1970
O1208.003	REL-REF	J,NP/A,633,1,1999	J,NP/A,633,1,1998
O1301.001	REL-REF	J,NP/A,724,413,2005	J,NP/A,724,413,2003
O1349.003	REL-REF	J,NP/A,223,214,1972	J,NP/A,184,214,1972
O1788.002	MONIT-REF	J,NP/A,105,1,1959	J,NP/A,105,1,1967

Table 2: Errors found in Physical Review C bibliographic data in EXFOR.

Entry	Keyword	EXFOR bibliography	Suggested correction
13782.001	REFERENCE	J,PR/C,65,014004,2001	J,PR/C,65,014004,2002
22109.003	REL-REF	J,PR/C,17,43,1973	J,PR/C,17,43,1978
22109.004	REL-REF	J,PR/C,17,43,1973	J,PR/C,17,43,1978
22656.001	REFERENCE	J,PR/C,65,(1),014604,2001	J,PR/C,65,014604,2002
22680.001	REL-REF	J,PR/C,65,014604,2001	J,PR/C,65,014604,2002
22968.001	REL-REF	J,PR/C,21,534,2007	J,PR/C,21,534,1980
23112.001	REL-REF	J,PR/C,68,064306,2001	J,PR/C,68,064306,2003
A0381.002	REL-REF	J,PR/C,29,1942,82	J,PR/C,29,1942,1984
A0381.003	REL-REF	J,PR/C,29,1942,82	J,PR/C,29,1942,1984
A1414.005	REL-REF	J,PR/C,1,427,1973	J,PR/C,8,427,1973
B0061.006	REL-REF	J,PR/C,8,1819,1974	J,PR/C,9,1819,1974
D0001.003	REL-REF	J,PR/C,5,738,1969	J,PR/C,5,738,1972
E2051.002	REL-REF	J,PR/C,22,1468,1990	J,PR/C,22,1468,1980
E2051.003	REL-REF	J,PR/C,22,1468,1990	J,PR/C,22,1468,1980
E2051.005	REL-REF	J,PR/C,22,1468,1990	J,PR/C,22,1468,1980
M0632.001	REFERENCE	J,PR/C,61,024604,1999	J,PR/C,61,064601,2000
M0648.009	REL-REF	J,PR/C,10,1667,1979	J,PR/C,19,1667,1979
M0648.017	REL-REF	J,PR/C,32,960,1983	J,PR/C,27,960,1983
M0648.018	REL-REF	J,PR/C,32,960,1983	J,PR/C,27,960,1983
M0738.003	REL-REF	J,PR/C,127,1273,1962	J,PR,127,1273,1962
O0798.002	REL-REF	J,PR/C,35,37,1989	J,PR/C,35,37,1987
O1163.002	REL-REF	J,PR/C,26,332,1962	J,PR/C,26,332,1982
O1335.003	REL-REF	J,PR/C,20,2227,1970	J,PR/C,20,2227,1979
O1761.001	REL-REF	J,PR/C,77,065801,2007	J,PR/C,77,065801,2008
T0164.001	REL-REF	J,PR/C,21,2288,198806	J,PR/C,21,2288,1980