

MEMO CP-A/108

21 Jan 2001

To: **Distribution**  
From: **F.E. Chukreev, S.Babykina**  
Subject: **Additions to Dictionaries**

Add to dictionary 36

,MLT,P	YLD	(Proton multiplicity)
,MLT,PIP	YLD	(Positive pion multiplicity)
,MLT,PIN	YLD	(Negative pion multiplicity)

The additional is needed to compile ZP/A,340,325,1991

SPL,AKE	E	(Average kinetic energy of energy of spallation products)
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Add to dictionary 24

PART-OUT                      Number of Emitted Particles.  
   Particle must be specified in PART-DET.  
The additional is needed to compile ZP/A,340,325,1991. See Fig.1

Add to dictionary 27

The list contains reaction products, which were investigated on Fragment Separator of GSI. The products can be used as beam, target (in reverse geometry) etc.

17-CL-41	(1234	)
17-CL-42	(1234	)
17-CL-43	(1234	)
23-V-55	(1234	)
24-CR-57	(1234	)
25-MN-59	(1234	)
25-MN-60	(1234	)
26-FE-62	(1234	)
27-CO-65	(1234	)
29-CU-71	(1234	)
35-BR-70	(1234	)
51-SB-111	(1234	)
52-TE-114	(1234	)
53-I-116	(1234	)
53-I-117	(1234	)
53-I-142	(1234	)
61-PM-132	(1234	)
61-PM-133	(1234	)
61-PM-134	(1234	)
61-PM-135	(1234	)

61-PM-136	(1234	)
61-PM-137	(1234	)
61-PM-138	(1234	)
61-PM-139	(1234	)
62-SM-135	(1234	)
62-SM-136	(1234	)
62-SM-137	(1234	)
62-SM-138	(1234	)
62-SM-139	(1234	)
63-EU-138	(1234	)
63-EU-139	(1234	)
63-EU-140	(1234	)
63-EU-141	(1234	)
64-GD-139	(1234	)
64-GD-140	(1234	)
64-GD-141	(1234	)
64-GD-142	(1234	)
64-GD-143	(1234	)
65-TB-142	(1234	)
65-TB-143	(1234	)
65-TB-144	(1234	)
65-TB-145	(1234	)
66-DY-144	(1234	)
66-DY-145	(1234	)
67-HO-146	(1234	)
67-HO-147	(1234	)
67-HO-148	(1234	)
68-ER-148	(1234	)
68-ER-149	(1234	)
70-YB-153	(1234	)
70-YB-156	(1234	)
70-YB-157	(1234	)
70-YB-158	(1234	)
70-YB-159	(1234	)
70-YB-160	(1234	)
70-YB-161	(1234	)
70-YB-162	(1234	)
70-YB-163	(1234	)
70-YB-164	(1234	)
71-LU-156	(1234	)
71-LU-157	(1234	)
71-LU-158	(1234	)
71-LU-159	(1234	)
71-LU-160	(1234	)
71-LU-161	(1234	)
71-LU-162	(1234	)
71-LU-163	(1234	)
71-LU-164	(1234	)
71-LU-165	(1234	)
71-LU-166	(1234	)
72-HF-169	(1234	)
73-TA-160	(1234	)
73-TA-161	(1234	)
73-TA-162	(1234	)
73-TA-163	(1234	)
73-TA-164	(1234	)
73-TA-165	(1234	)

73-TA-166	(1234	)
73-TA-167	(1234	)
73-TA-168	(1234	)
73-TA-169	(1234	)
73-TA-170	(1234	)
73-TA-171	(1234	)
73-TA-172	(1234	)
74-W-165	(1234	)
74-W-166	(1234	)
74-W-167	(1234	)
74-W-168	(1234	)
74-W-169	(1234	)
74-W-170	(1234	)
74-W-171	(1234	)
74-W-173	(1234	)
74-W-175	(1234	)
75-RE-165	(1234	)
75-RE-166	(1234	)
75-RE-167	(1234	)
75-RE-170	(1234	)
75-RE-171	(1234	)
75-RE-172	(1234	)
75-RE-173	(1234	)
75-RE-174	(1234	)
75-RE-175	(1234	)
75-RE-176	(1234	)
76-OS-172	(1234	)
76-OS-173	(1234	)
76-OS-174	(1234	)
76-OS-175	(1234	)
76-OS-176	(1234	)
76-OS-177	(1234	)
76-OS-179	(1234	)
76-OS-181	(1234	)
77-IR-172	(1234	)
77-IR-173	(1234	)
77-IR-174	(1234	)
77-IR-175	(1234	)
77-IR-176	(1234	)
77-IR-177	(1234	)
77-IR-178	(1234	)
77-IR-179	(1234	)
77-IR-180	(1234	)
77-IR-181	(1234	)
77-IR-182	(1234	)
77-IR-183	(1234	)
78-PT-173	(1234	)
78-PT-174	(1234	)
78-PT-175	(1234	)
78-PT-176	(1234	)
78-PT-177	(1234	)
78-PT-178	(1234	)
78-PT-179	(1234	)
78-PT-180	(1234	)
78-PT-181	(1234	)
78-PT-182	(1234	)
78-PT-183	(1234	)

78-PT-184 (1234 )  
78-PT-185 (1234 )  
78-PT-187 (1234 )  
79-AU-177 (1234 )  
79-AU-178 (1234 )  
79-AU-179 (1234 )  
79-AU-181 (1234 )  
79-AU-183 (1234 )  
79-AU-185 (1234 )  
79-AU-187 (1234 )  
82-PB-187 (1234 )  
82-PB-188 (1234 )  
82-PB-189 (1234 )  
82-PB-190 (1234 )  
82-PB-191 (1234 )  
82-PB-192 (1234 )  
82-PB-193 (1234 )  
85-AT-201 (1234 )  
85-AT-202 (1234 )

Code of second isomer must be added  
49-IN-122 ( 34 2)

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