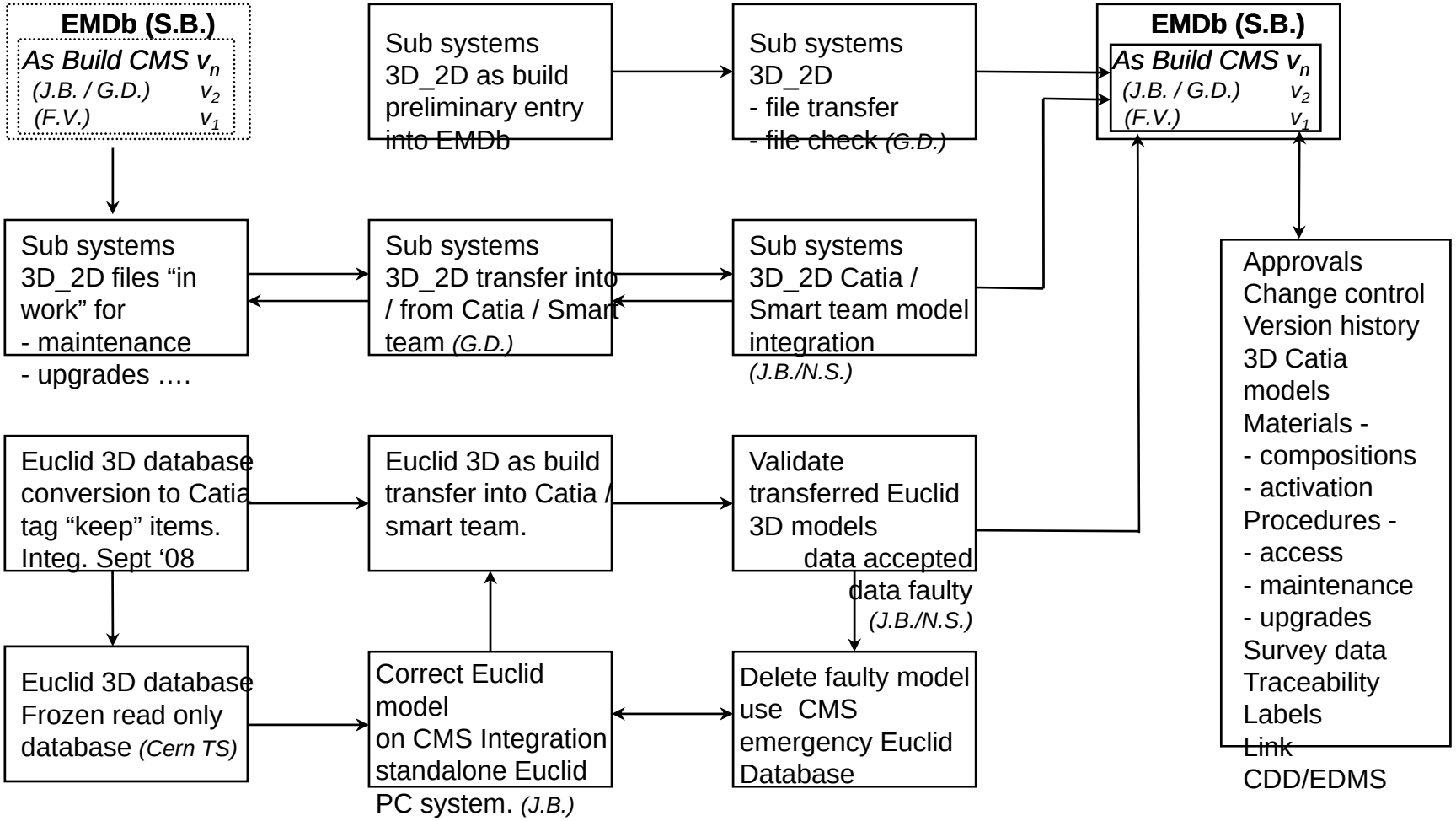
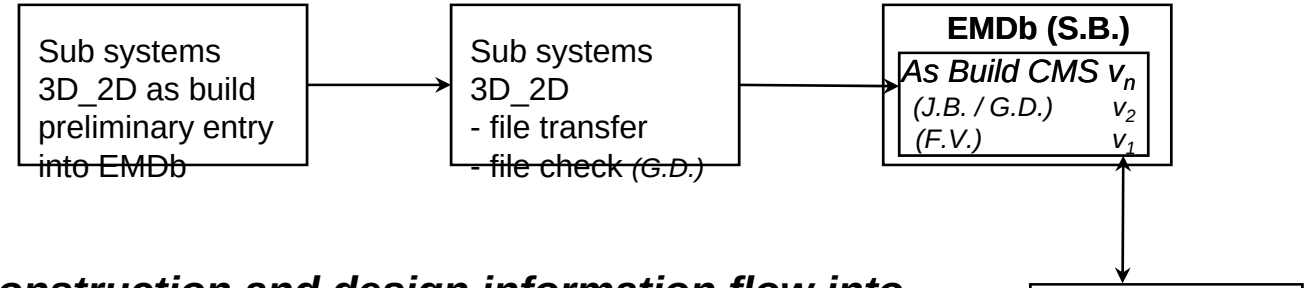
EMDb and “As Build” data Integration



EMDb and “As Build” data Integration



General detector construction and design information flow into the EMDb

Temporary storage of 3D_2D information inside the EMDb, to be replaced with the final “As build_installed_positioned” CMS-INB reference data in
Collaboration with the Detector link persons and Institute design offices.

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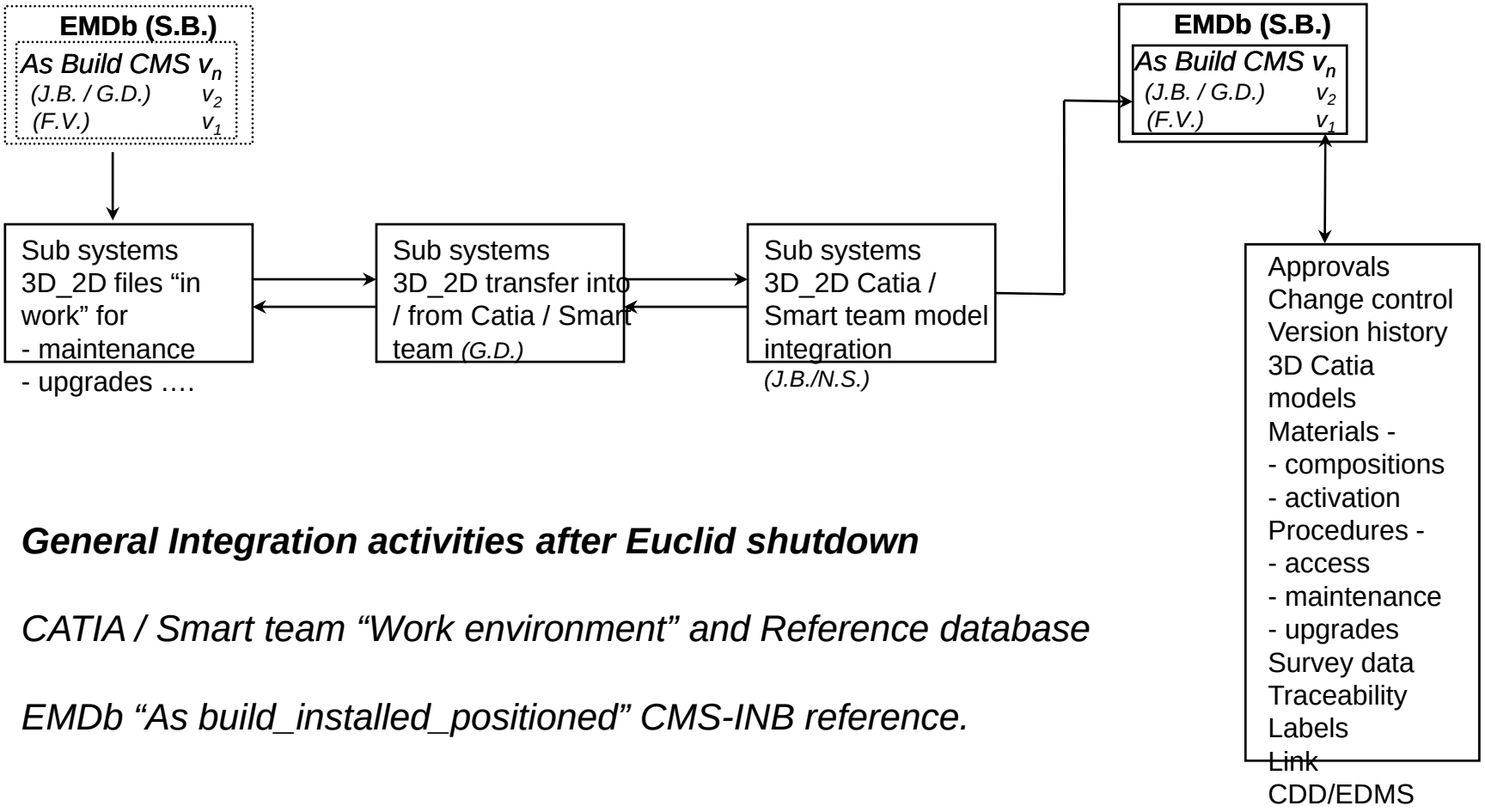
CDD/EDMS

EMDb link to the CMS Integration work



General Integration activities after Euclid shutdown

CATIA / Smart team "Work environment" and Reference database

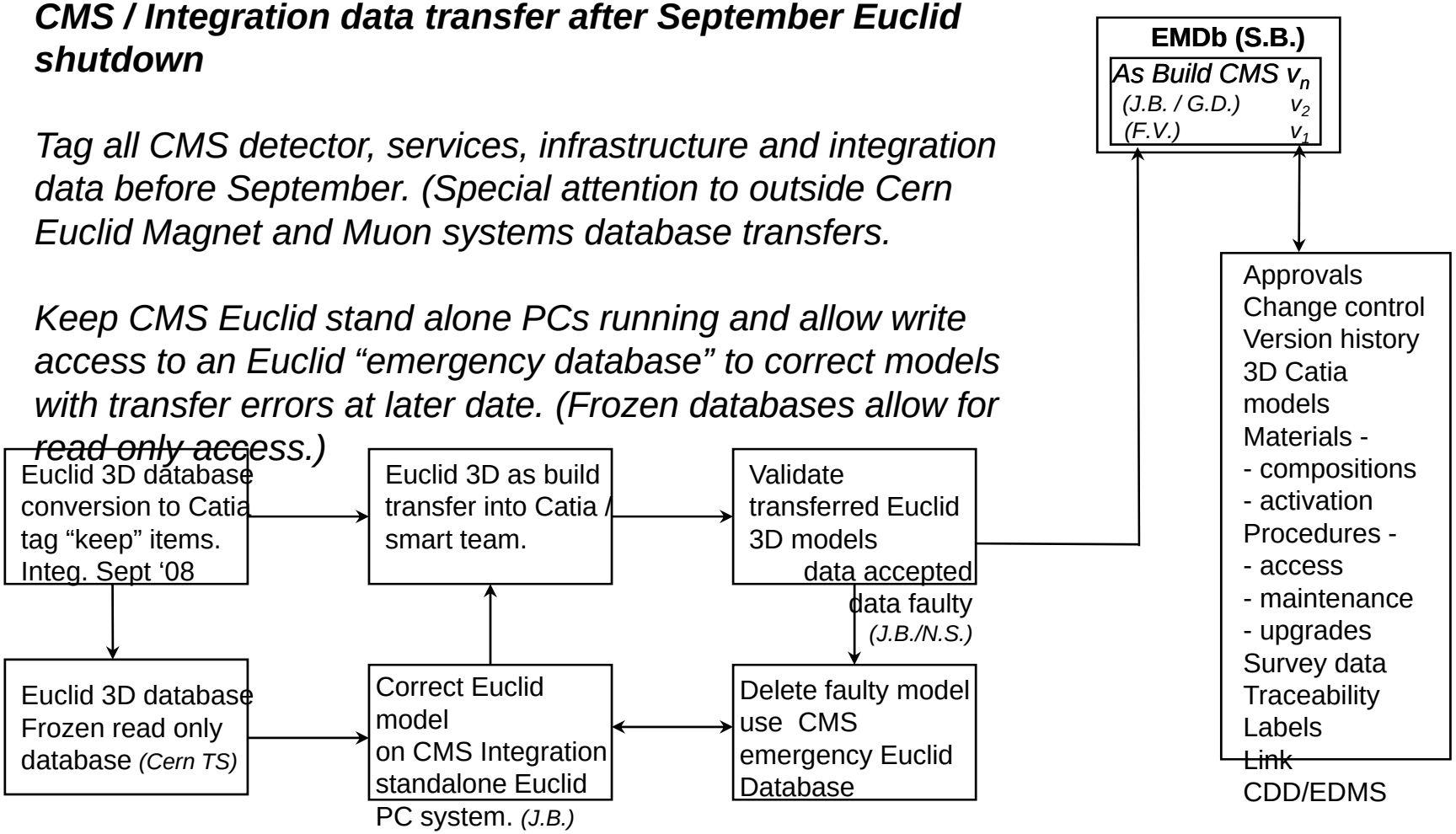
EMDb "As build_installed_positioned" CMS-INB reference.

EMDb and “As Build” data Integration

CMS / Integration data transfer after September Euclid shutdown

Tag all CMS detector, services, infrastructure and integration data before September. (Special attention to outside Cern Euclid Magnet and Muon systems database transfers.

Keep CMS Euclid stand alone PCs running and allow write access to an Euclid “emergency database” to correct models with transfer errors at later date. (Frozen databases allow for read only access.)



EMDb and CMS Euclid/CATIA data transfer

ACTIVITY	Sum of tot	Sum of Plans	Sum of PlansU	Sum of Unknov	Sum of Keep	Sum of Delete	Sum of Critical	Sum of Frozen
CMS_DILR	353	136	0	3	192	5	17	0
CMS_EA	4521	1467	347	817	722	764	746	1
CMS_VAC	1570	775	232	81	110	193	405	34
CMS_TRACK	2487	759	283	207	1305	192	19	0
CMS_ECB	4656	2158	1871	2054	407	1	32	30
CMS_HCAL	4	0	0	4	0	0	0	0
CMS_MAGNET	284	112	112	153	16	0	2	0
CMS_IRON	1937	201	180	1419	158	0	159	0
CMS_WOGEI	5428	1514	1514	3839	38	0	26	0
TOTAL	21240	7122	4539	8577	2948	1155	1406	65

TS / VAC

CMS_DILR,ROMAN_POTS,DILR,
CMS_DILR,ROMAN_POTS_SERV,DISV,
CMS_EA,CRYOGENICS,QQ17,
CMS_EA,DIEXC_CABLAGE,CM42,
CMS_EA,POINT5_GAZ,CM45,
CMS_EA,SOUT5_EXP_INFRA,CM40,
CMS_EA,SOUT5_EXP_INFRA2,CM43,
CMS_EA,SOUT5_EXP_INFRA3,CM44,
CMS_EA,SOUT5_VENT_AERO,CM65,
CMS_EA,SOUT6_VENT_TUY,CM26,
CMS_EA,SURF5_BAT,CM41,
CMS_EA,SURF5_VENT_AERO,CM66,
CMS_EA,SURF6_VENT_TUY,CM27,
CMS_VAC,VACUUM_CHAMBER,CM50,
CMS_VAC,VACUUM_CHAMBER2,CM52,

TOTAL 6445

CMS DET

CMS_TRACK,OUTER_BARREL,TOBM,
CMS_TRACK,OUTER_BARREL_TT,TOBT,
CMS_TRACK,TAXXX_ALIGNEMENT,TA01,
CMS_TRACK,TLXXX_MSG_BARRL,TL01,
CMS_ECB,ASSEMBLY,CM74,
CMS_ECB,EBAHM_HANDLIN000,CM70,
CMS_ECB,EBAHM_HANDLIN023,5501,
CMS_ECB,GENERAL,CM71,
CMS_ECB,GENERAL2,CM72,
CMS_ECB,GENERAL3,CM75,
CMS_ECB,GENERAL4,CM77,
CMS_ECB,GENERAL5,CM79,
CMS_ECB,GENERAL6,CM80,
CMS_ECB,GENERAL7,CM81,
CMS_ECB,REG_CENTER_TOOL,CM73,
CMS_ECB,REG_CENTER_TOOL2,CM76,
CMS_ECB,REG_CENTER_TOOL3,CM78,
CMS_ECB,REG_CENTER_TOOL4,CM82,
CMS_WOGEI,MUONB,DIMB,
CMS_WOGEI,STRUCTURE,DI_P,
CMS_WOGEI,INSTALLATION,DI_Q,
CMS_WOGEI,STRUCTURE2,DI_V,

TOTAL 8160

INTEG

CMS_WOGEI,AMENAGEMENT,DI_C,
CMS_WOGEI,AMENAGEMENT2,DI_B,
CMS_WOGEI,AMENAGEMENT3,DI_I,
CMS_WOGEI,AMENAGEMENT4,DI_J,
CMS_WOGEI,AMENAGEMENT5,DI_X,
CMS_WOGEI,AMENAGEMENT6,DI_S,
CMS_WOGEI,AMENAGEMENT7,DI_Y,
CMS_WOGEI,AMENAGEMENT8,DI_F,
CMS_WOGEI,AMENAGEMENT9,DI_L,
CMS_WOGEI,ECAL,DI_E,
CMS_IRON,BAR,CM51,

TOTAL 6635

EMDb (S.B.)

As Build CMS v_n
(J.B. / G.D.) v_2
(F.V.) v_1

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Euclid 3D database conversion to Catia tag “keep” items. Integ. Sept ‘08

Euclid 3D as build transfer into Catia / smart team.

Validate transferred Euclid 3D models
data accepted
data faulty *(J.B./N.S.)*

Euclid 3D database Frozen read only database *(Cern TS)*

Correct Euclid model on CMS Integration standalone Euclid PC system. *(J.B.)*

Delete faulty model use CMS emergency Euclid Database

EMDb and CMS Euclid/AutoCad data linking

ETH Institute for Particle Physics

CMS EUCLID / AUTOCAD

	YB 0		YB 1+2		YE 1		YE 2		YE 3		HF	
YOKE	IRON	MHBovard	IRON	MHBovard	IRON	FFeyzi	IRON	FFeyzi	IRON	FFeyzi	IRON	Fermi lab
	COIL	Saclay										
	CRYO	Saclay										
	WALKWAYS	Shawton	WALKWAYS	Shawton	WALKWAYS	Shawton	WALKWAYS	Shawton	WALKWAYS	Shawton	WALKWAYS	JCdM
	COOLING	Zek	COOLING	Zek	COOLING	Zek	COOLING	Zek	COOLING	Zek	COOLING	Ianos
	GAS		GAS		GAS		GAS		GAS		GAS	Ianos
	CABLES		CABLES		CABLES		CABLES		CABLES		CABLES	Ianos
	TRAYS		TRAYS		TRAYS		TRAYS		TRAYS		TRAYS	
	SHIELD	DD IR	SHIELD	DD							RISERS	JCDM
											Pfaff syst	HG
DETECT	PIXEL	PSI										
	TRACKER	AOnella			ES	Rloos					WEDGES	fermi lab
	ECAL B	Fmossiere			ECAL E	Jhill						
	HCAL B	Ichurin			HCAL E							
	HOB	Ddattola	HOB	Ddattola	RE	WvD			RE	WvD		
	MUONS	Ddattola	MUONS	Ddattola	CSC	FFeyzi	CSC	FFeyzi	CSC	FFeyzi		
ALIGN	MABS	MHBovard	MABS	MHBovard	Alignm	FF	Alignm	FF	Alignm	FF	Alignment	JCdM
	BRACKET	TS/SU	BRACKET	TS/SU	Link	T R						
	HYDRO	TS/SU										
	LINK	Ecalvo			LINK	Ecalvo						
SERVICES	VT TRAYS		PP & Chains	Ddattola	PP & Chains	Plamen	Mini Chains	Dwenman	Mini Chains	Dwenman	Chain	Gdu

EMDb (S.B.)

As Build CMS v_n

(J.B. / G.D.) v_2

(F.V.) v_1

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G.W.Faber
ETH-Z june'08