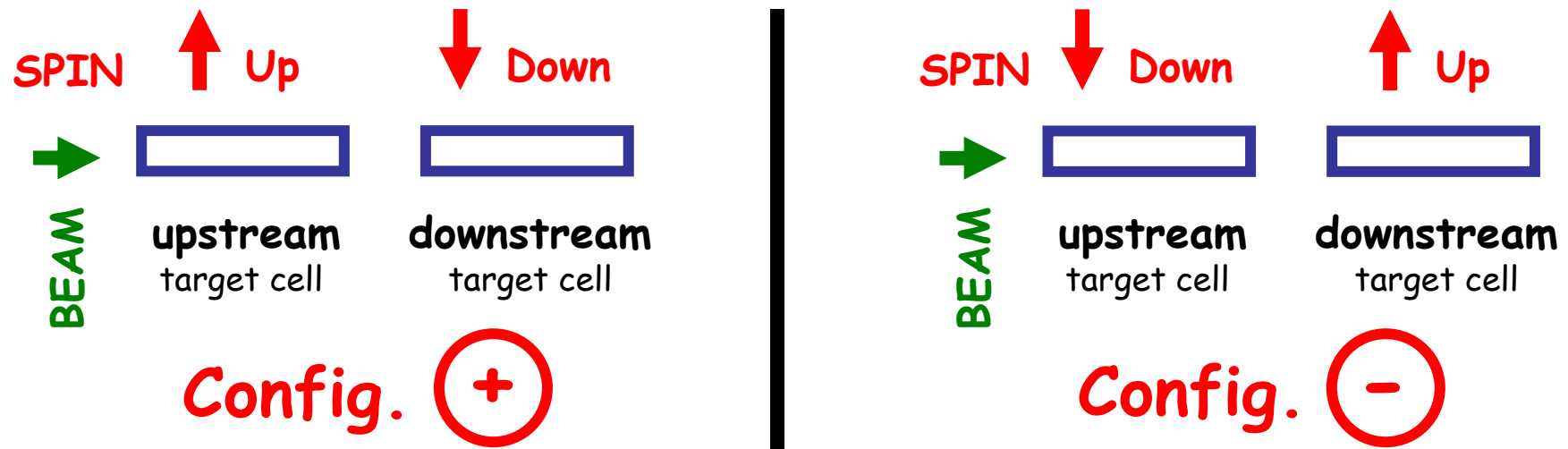
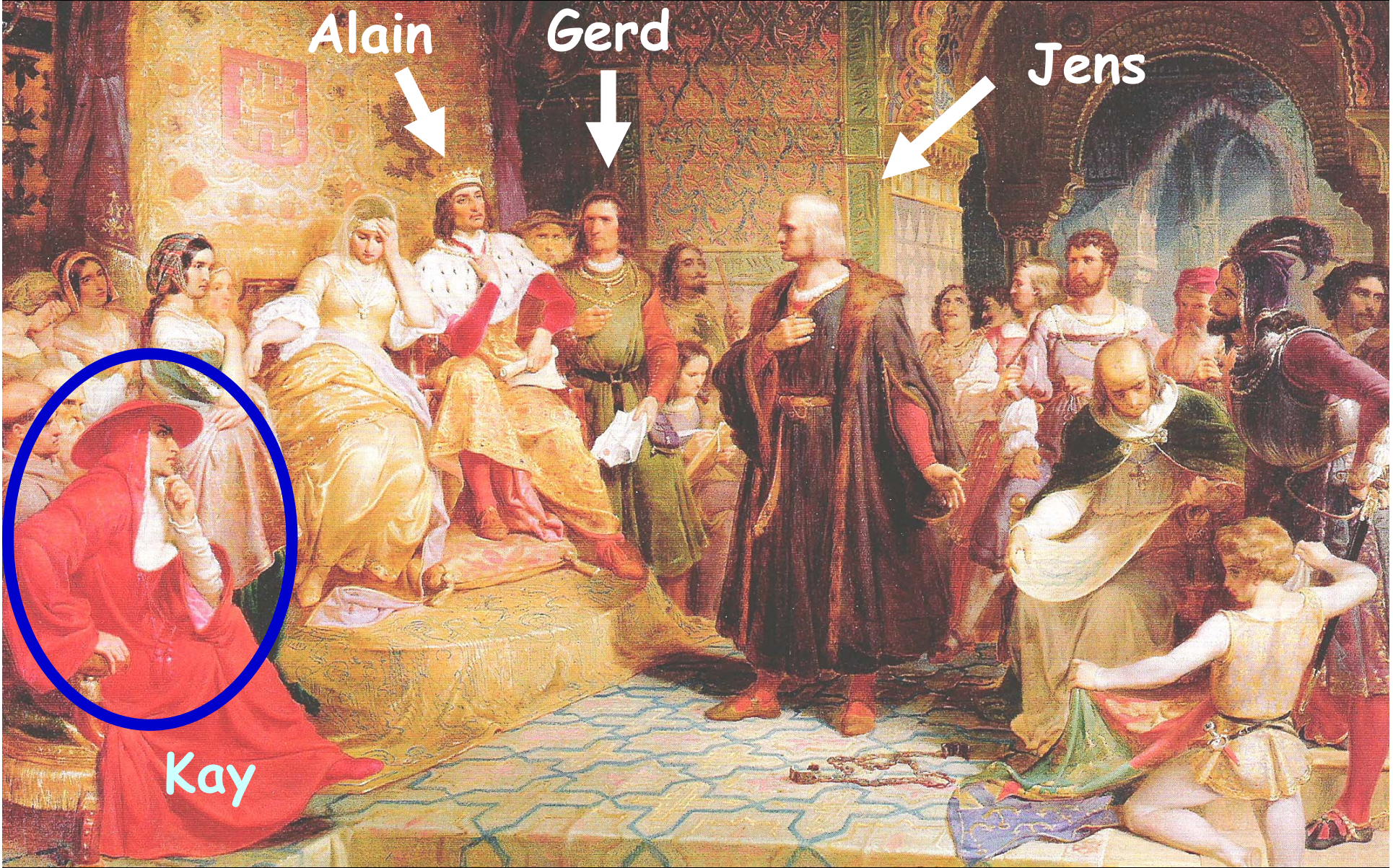


# COMPASS 2004 run: Aug. 27 - Sept. 3

Week report by J. Bisplinghoff

## Transversity



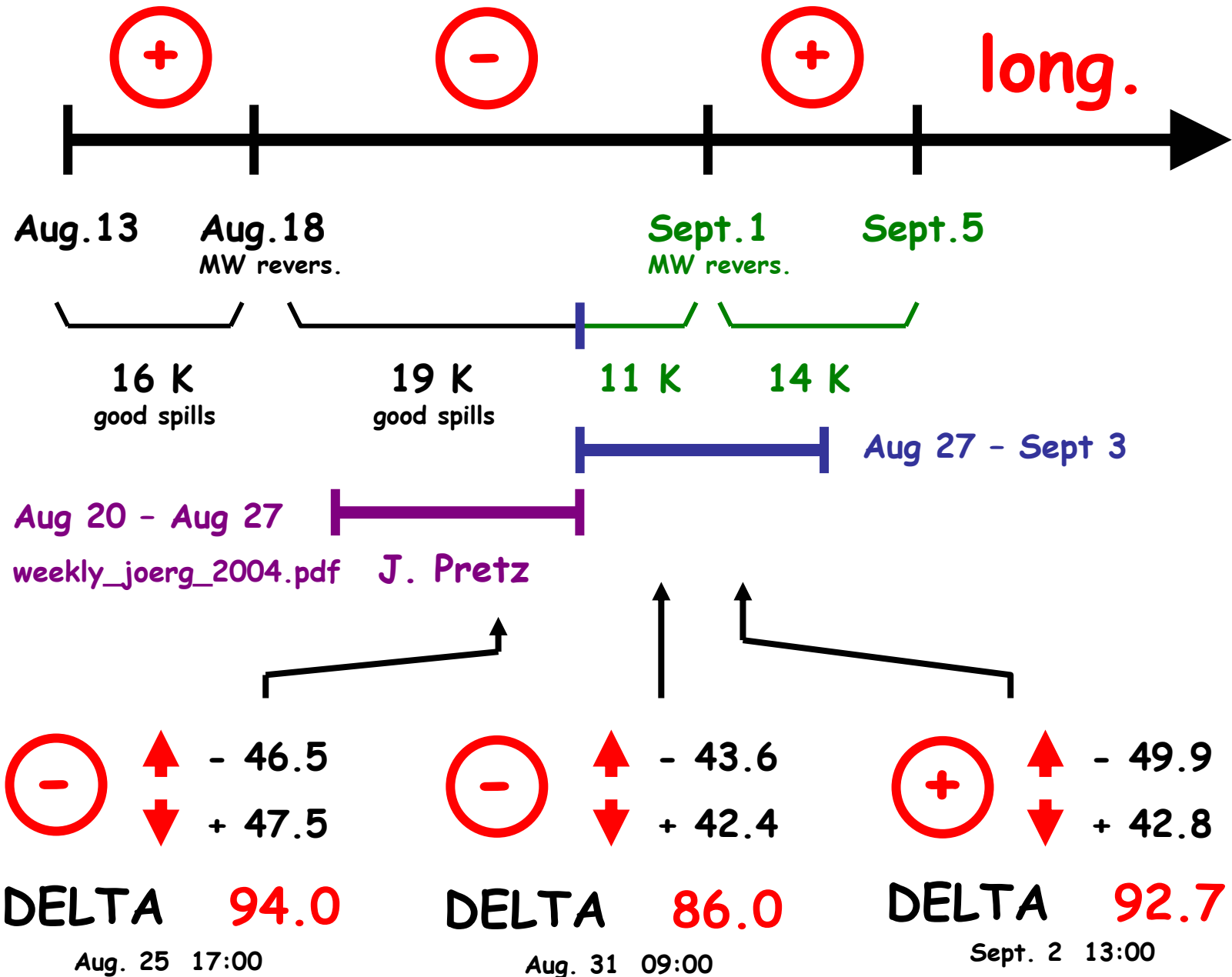


Alain

Gerd

Jens

Kay



Period From: Fri, 27 Aug 2004 12:00 To: Fri, 03 Sep 2004 12:00

Calculated At: Fri, 03 Sep 2004 12:27

Length of time excluding scheduled MD: 168.00 hours

\*\*\*\* Efficiency of PS/SPS

a: Total SPS Circle (exclude scheduled MD): 31959.0  
b: SPS spill with T6 current >30.0: 26750  
c: Sum of T6 current 3358787.0  
d: (=b/a) PS/SPS Efficiency: 83.7%

**SPS : 84 %**  
**COMPASS : 90 %**

\*\*\*\* Muon Beam In HALL 888

f: SPS spill In Hall with Muon Count >100000.0: 25242  
g: Sum of In Hall Muon Count: 4155992165680.0  
h: (=f/b) SPS Spill Get in 888: 94.4%

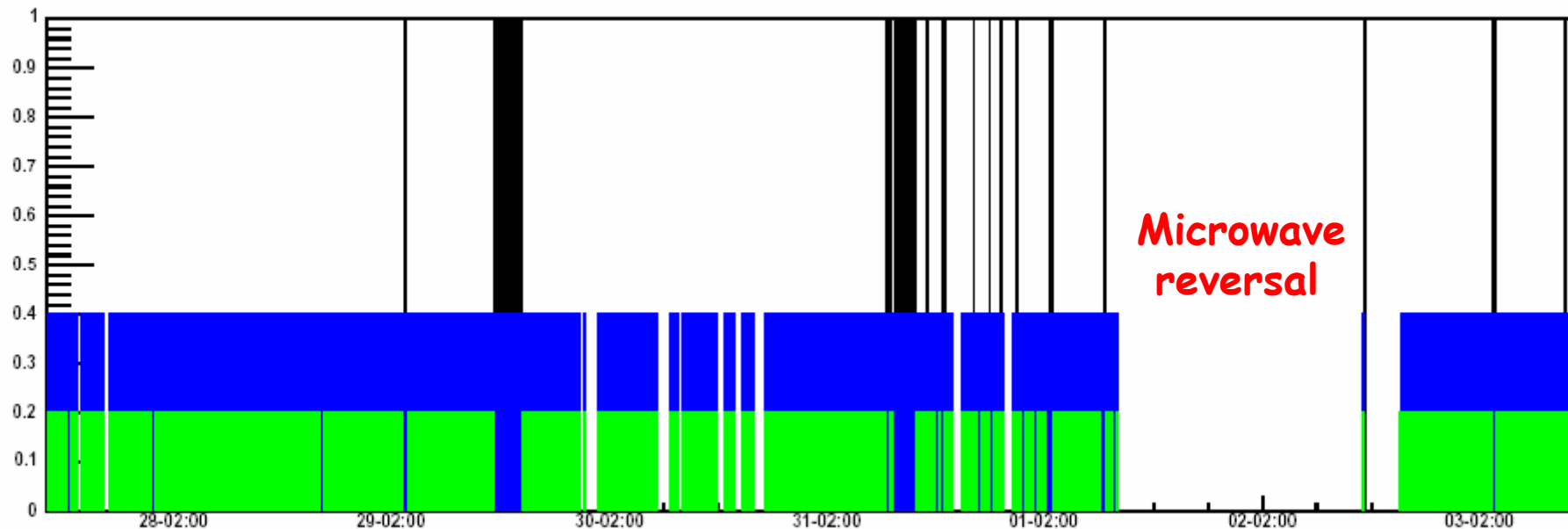
Distribution of used spills:

transversity runs used 19353 spills, 85.1%  
beam\_test runs used 51 spills, 0.2%  
detector\_test runs used 1816 spills, 8.0%  
DAQ\_test runs used 55 spills, 0.2%  
alignement runs used 1467 spills, 6.5%

\*\*\*\* Use of SPS/Inhall Spill in COMPASS

i: Spill used with ion chamber counting >100.0: 22742  
j: (=i/f) Inhall spill used: 90.1%  
k: (=i/b) SPS spill used: 85.0%

DAQ WORKING TIME(green)/BEAM NOT IN HALL TIME(BLACK)/SPS WORKING TIME(BLUE))



Date 2004	Shift (hrs)	C F G	Comments	Good Spills ( ~ )	NO beam (~min)
Aug. 27	16-24	-	Very few ( insignificant ) glitches	1400	30
Aug. 28	00-08	-	dto.	1600	
Aug. 28	08-16	-	dto.	1600	
Aug. 28	16-24	-	dto.	1600	
Aug. 29	00-08	-	W4/5 (LV) <b>access</b> , lost 2 h, RICH HV trips	1000	
Aug. 29	08-16	-	MWPC (El.) <b>access</b> , lost 3 h, RICH HV trips	1000	
Aug. 29	16-24	-	Few glitches, 1 Ch. RICH HV - > 1500 V	1000	60
Aug. 30	00-08	-	dto.	1300	80
Aug. 30	08-16	-	dto., DAQ crashes ( SI )	1300	100
Aug. 30	16-24	-	dto., DAQ crashes ( SI )	1100	105
Aug. 31	00-08	-	dto., 1 Ch. RICH HV 1500 V -> nominal	1600	
	<b>Total</b>		<b>good spills</b> / min. no beam	<b>14500</b>	375

**Efficiency SPS : 93 % COMPASS : 83 %**

Report Aug. 27 (Fri 16:00) - Sept. 3 (Fri 16:00), 2004 :

week04.wpd

Date 2004	Shift (hrs)	C F G	Comments	Good Spills ( ~ )	NO beam (~min)
Aug. 31	08-16		Start <b>microwave reversal</b> , <b>Alignment</b> runs Target dipole off, SM1/2 on/off, Chicane on/off		
Aug. 31	16-24		~ 3 h MD ( start 15:00 ) @ full mu beam in 888 <b>Alignment</b> runs <b>mu- / mu+</b> (mags as above) "Q11-Problem" cured, retaining <b>280 A</b> for transversity, rather than 290 A (beam file 2.20)		
Sept. 1	00-08		Detector diagnostics ( empty target head )		
Sept. 1	08-16		Detector diagnostics 40 mm, <b>10:00</b> start <b>MD</b> Restart <b>Straw HVs</b> ( OFF for safety 08/31 ) Replace LV power supply <b>ECAL</b> Check <b>Sis</b> (DAQ crashes), reroute cables Fix root cause for <b>W4/5</b> LV failure		
Sept. 1	16-24		<b>MD</b> , LED tune <b>ECAL</b> ( access )		
Sept. 2	00-08		<b>MD</b> , Raise ADC board voltage <b>Sis</b> ( access )		
	<b>Total</b>		<b>good spills</b> / min. no beam	<b>??</b>	<b>??</b>

Report Aug. 27 (Fri 16:00) - Sept. 3 (Fri 16:00), 2004 :

week04.wpd

Date 2004	Shift (hrs)	C F G	Comments	Good Spills ( ~ )	NO beam (~min)
Sept. 2	08-16	+	Essentially no beam, target -> transversity	20	465
Sept. 2	16-24	+	SI01 problem ( noise )	1150	90
Sept. 3	00-08	+	Replace CATCH SciFiG, lost 1 h ; RICH Ctrl.	1400	
Sept. 3	08-16	+	going well !		
	<b>Total</b>		<b>good spills / min. no beam</b>	<b>2570</b>	<b>555</b>

Efficiency **SPS : 61 %**      **COMPASS : 81 %**

# PROVISIONING

**Carrefour** 

Distributis AG, Dietlikon  
HYPERMARCHÉ CARREFOUR  
171, route de Meyrin  
1214 Vernier  
No.Tel. 022-306-08-38

CENTRE E.LECLERC  
FERNEY VOLTAIRE  
BIENVENUE DANS VOTRE  
NOUVEL HYPERMARCHÉ

\* HYPER CHAMPION \*

[www.provencisa.fr](http://www.provencisa.fr)

FIL:06 CAISSE:19

27/08/04 15:13

27 aout 2004 20:14



# CAT O' NINE TAILS



**IF YOU**

( without explicit permission OR without log entry )

Move any Detector	36	lashes
Change any HV(s)	24	lashes
Change any Threshold(s)	24	lashes
Mask any Alarm(s)	12	lashes

**Crime** ( upon approval by GLB -> MoU ) **Lashes**

Initiating unnecessary or **unsuccessful** access 24

Failing to **promptly** return area key 12

Wasting spills ( for ANY reason ) 24

Insufficient or **inaccurate** log keeping 12

Failing to salute spokesperson 18

run-coordinator 12

week-coordinator 6

**Crime**

**Lashes**

**Conduct to the detriment of good order  
and discipline, OR otherwise improper,  
OR unbecoming of COMPASS**

**12**

Ceterum censeo .....

Cool 888 !





**Efficiency :**

**SPS :**

( # shifts x 480 min. - total min. no beam ) / ( # shifts x 480 min. )

**COMPASS :**

{ ( # shifts x 480 min. - total min. no beam ) / ( 56 min. \* ) x 200 } /

{ # of **good spills** recorded }

\* One run of 200 spills takes ~ 56 min. !