Exotics MC Coordination <u>Status Report</u>

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Simulation Meeting dt Oct 23, 2003

- Analyses in progress.
- Recent and ongoing requests.
- Projected requests (undigested).
- Communications wish list.
- MC request form.

Analyses in Progress (a la Steve Worm)

	#	who	what
VEGans	1	Rob H.	X --> Dijets
	2	Muge/Kaori	Z' --> mu mu
	3	Koji/Kaori	Z' --> e e
	4		Z' --> ee or mumu
		Tracey et al	LED --> diphoton
	5	Bill/Rick	CHAMPS
	6	Simona	LQ1 --> eejj
	7	Dmitri	LQ --> jjMET
		Simona	LQ1 --> eνjj
		Simona	LQ2 --> $\mu\mu$jj
		Simona	LQ1 combined
	8	Peter O.	X --> gamma MET
		Zongru/Kaori	Z' --> tau tau
		Abe	X --> l +X
		Mike	monopoles
	9	Heather/Kotwal	e* --> e gamma
		Bruce	sleuth/MC

Analyses in Progress (contd)

	#	who	what
SUSY		Aiden/Vladimir	SUSY trileptons
		Matt/Doug	Bs --> mu mu
	10	Ray	X --> gamma gamma
	11	Minsuk	GMSB --> gamma gamma
		Rott, Munar	sbottom --> bottom neutralino
		Beate/student	X --> W/Z gamma
		Loginov	X --> l gamma
		Tara	B gamma
		SongMing	stop --> charm LSP
		T. Ogawa	R_p stop --> tau
		Sasha	SUSY --> tau trilep
Higgs		H.Kobayashi et al	Bosophilic H --> like-sign dilep
		Aaron	SM Higgs --> bbbb
	12	C. Hays	Higgs++ --> ee
		C. Hays	Higgs++ --> $\mu\mu$
		Anton	SUSY Higgs --> lepton tau
		Dongwook	SUSY Higgs --> tau tau
		Kevin	Higgs --> WW
		Jieun Kim	charged higgs

Recent and Ongoing Requests

- A number of graduating students in 2003.
- Not everybody waiting for the next version
- Requests being processed, several more in the pipeline
- Thanks to Reda, Andreas and co. for speedy turnaround.

Recent and Ongoing Requests

- QCD di-jet with Pythia, Ptmin = 80 GeV
- Rick Field tune "A", Winter 2003 settings (beam offset, offline version 4.9.1hpt3, ...)
- Number of events = 10 million ! (Song Ming and Dmitri Tsybychev and co.)
- ===============
- Two W/Z+jets 300K samples Z (->νν)+ 2/3 partons, Alpgen. (production) (Carsten Rott) (4.9.1, too).

Recent and Ongoing Requests

- Pythia generator. H->WW dileptons. > > 150K mhiggs=140 GeV > 150K 150 GeV > 150K 170 GeV > 150K 180 GeV (Susana Cabrera and co.)

- ================

- QCD sample for the gluino-sbottom-Higgs

  HZ->bbνν Winter conferences with 4.9 (high MET and bb content → more statistics). 1st sample 500k with 40<pt<60, and 1M with pt>60. Later: filtered sample with enhanced heavy flavor content. (Tony Munar)

Raw Requests (tau analyses)

TYPE	NO OF EVENTS	WHO	TOP DATA (exists?)
Z/gam*->tautau	3M	AA,DJ,AL,ZW	ztop3t
W->e nu	1M	"	wtop?e
W->mu nu	1M	"	wtop?m
W->tau nu	1M	"	wtop?t
W->e+1jet	1M	"	wev1p
W->mu+1jet	1M	"	wmv1p
Z->ee	1M	"	ztop?e
Z->mumu	1M	"	ztop?m
WW (+1jet) (alpgen)	500k		atop?x
WZ (+1jet)	500k		atop?y
ZZ	500k		atop?z
QCD dijet sample?	6M		jtop?d

Raw Requests (tau analyses)

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                    signal
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A->tautau	6 points x 1M = 6M events.
H++/H--	6 points x 100k = 600k
h+/h-	6 points x 100k = 600k
A->tautau, bb	6 points x 500k = 3M

Raw Requests (various)

- SUSY Trileptons: 2M low-mass DY, bb/cc also 2M (shareable), 5M for signal scan
- bbH $\rightarrow$ 4b will need 5-10M events
- VEGY group collecting info
- (next round of conferences does not seem too real yet…)

Communications Wish list

- Projected times to completion for queued samples.
- What else is in the pipeline? How busy are the resources on the timescale of a day or a week …..? When will a request be done?
- Much can be achieved by a single MC Farm page:

Sample	#events	who	request dt	completion dt
A$\rightarrow$bb	1M	joe	10/9/03	10/22/03
B$\rightarrow$cc	3M	doe	10/15/03	10/31/03?

- After a sample is done, do the tcl and log files drop somewhere that I can point to?

MC Production Request Form/Webpage

- date: Request received
- date: Convener ok
- date: MC/Prduction ok
- date: DFC_ID generated (ready to go)
- date: Actual completion
- ==
- Requestor Name/Institution/Email address/Phone/Trailer office location:
- Request Title (e.g. Badgraph W+Njets) and which analysis:
- Need by date (e.g. June 31, 2004), Special reasons
 (e.g. for Slepton Futon conference on xx/xx, need to graduate by yy/yy):

MC Production Request Form (contd.)

- Justify number of events. Generated a small sample?:
- Do you need the whole sample, or a smaller subset first?
- Any possible other users? Coordinated generation/cuts?:
- Why do you need farms as opposed to other resources?
- Technical details (Please be generous with details):
- Number of subsets/Events per subset/ Total events:
- Subsample 1):
- Name and very short optional description
- DFC_ID : (Leave blank for the MC coordinator.)
- Number of events:
- Tunable parameter info (in tcl file, say) , if any:
- Tcl file etc location/name:

MC Production Request Form (contd.)

- Input file (such as hepg) details (generation, sizes etc), if any:

- event numbers in each, naming scheme, etc:

- Input fileset 1):

- Name (e.g. W+0 parton), very short optional description

- DFC_ID : (Leave blank unless it was generated.)

- Dataset_name: e.g. MadGraph_Pythia_W_enu_match10_v01

- File_names : e.g. 72342.W+0run1*root* (88 files)

- Datafile location: e.g. fcdfdata031.fnal.gov:/cdf/scratch/cdfmc/forProd

- Name/location of generation time tcl and log files:

- File locations for other relevant input/log/tcl etc files, if any:

- Any other comments (As much detail as possible):

K* Primakoff Production
K+γ → K**→K*π → (Kπ)π
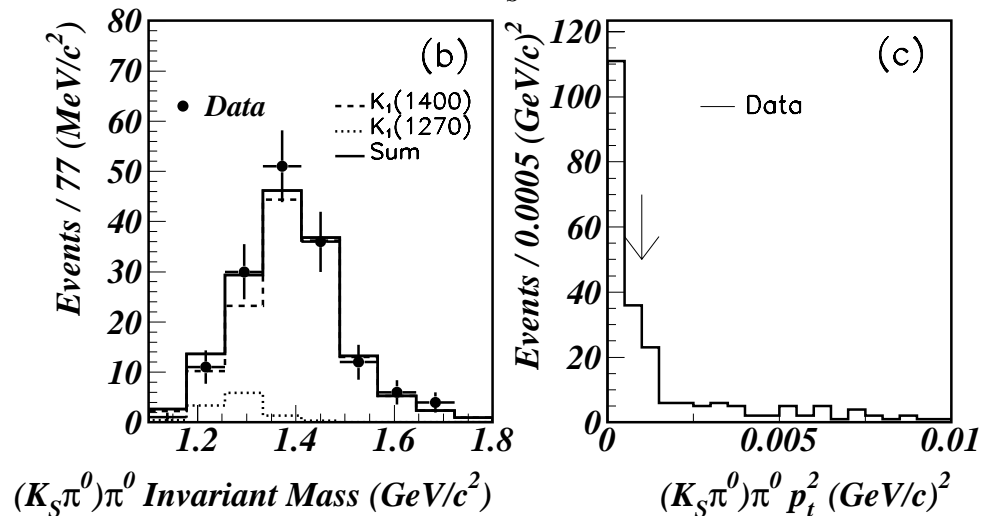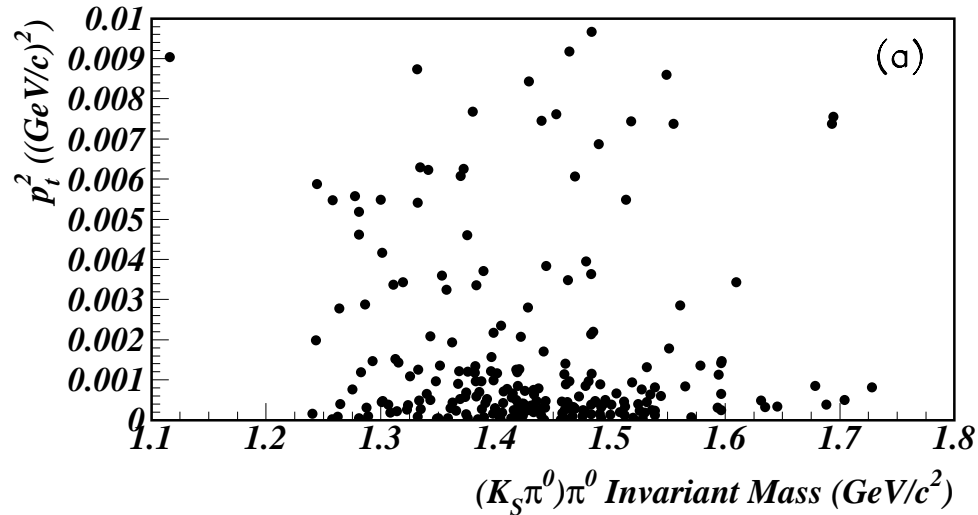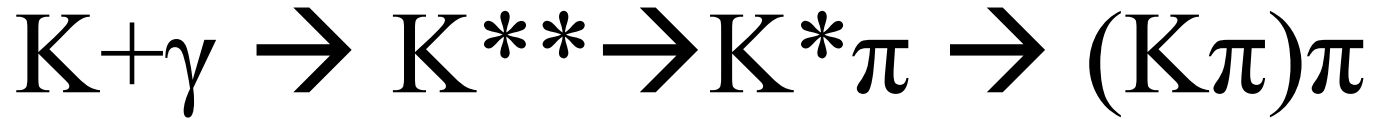
Conclusion

Not much to conclude yet except:

This talk needs some color (Steve Worm)