

*Assign probability that candidate event
is a tau or background*

$$P_{\tau}(\phi, \theta_{\text{lepton}}, l_{\text{decay}}, P_{\text{daughter}}, \theta_{\text{daughter}})$$

$$P_{\text{bkg}}(\phi, \theta_{\text{lepton}}, l_{\text{decay}}, P_{\text{daughter}}, \theta_{\text{daughter}})$$

*For both tau and background define volume in hyperspace of
parameters such that a certain percentage of simulated events
are in the interior.*

Volumes --> clusters of bins

cont.c generates clusters

bins simulated events

finds heighest weighted bin

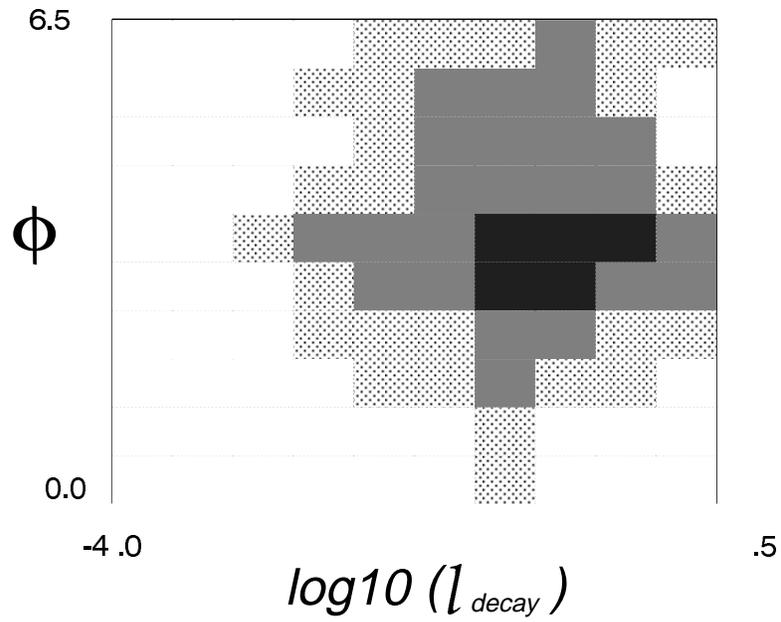
orders bins by weight

sums weight fraction of ordered bins

99840.825800	0.006658	4	5	7	7	4
86875.250000	0.012452	4	5	7	8	3
84967.850000	0.018118	4	6	7	7	4
78124.842000	0.023328	4	6	6	6	5
76351.680000	0.028420	4	5	7	6	5
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2 parameter projection of hypervolume: tau events

50, 90, 99 % contours for angular difference and decay length.



Output for generated tau events :

# parameters	5	5	5
#events used to define volume	10k	50 k	90k
# test events	1200	1200	1200
test events within 50 % vol.	.36	.45	.47
test events within 90 % vol.	.65	.80	.83
test events within 99 % vol.	.75	.90	.94