















Cabot Summer School on Uncertainty Expert Elicitation Research Topics













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		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			
Ice sheet contrib	oution to SLI	R in 210	0 @ 3C	warmin	g [mm]
	Mean	StDev	5%-ile	50%-ile	95%-ile
Expert 1 indep	295	196	53	263	691
Expert 1 Tail Dep	295	222	53	249	752
Expert 7 indep	407	189	171	377	787
Expert 7 Tail Dep	406	225	150	359	861





















	C*/ reward	ERE accuracy reward
Vesuvius	0%	15%
Gas95	9%	45%
Phearl	14%	43%
Disper	0%	27%
Denos	0%	50%
se probabilities is gr ngle "best expert" <i>a</i> s generally better tha	eater than 50% <i>priori</i> is hazardo n all individual e	! ous, as the optimum I experts.







Project (project_2006-06-26)		It	ems		
Matrices (33)		Item's description	Item's value		
Bradley-Terry	1	tax@pump			
🗰 · Thurstone 🖭 · Probabilistic inversion	2	TaxBreak			
Results	3	RoadTax			
Options	4	CO2Cap			
	5	CleanCoal			
	Refere Bradley	nce values -Terry: Select a ref. item s	Thurstone: Select the 1st r Select the 2nd r	ef. item V ref. item V	







1			Evnerts	
Petrology –			Laperts	
Workshop		Expert's nickname	p-value	Expert's description
findinas	1	An expert 1	0.2870	
	2	An expert 2	0.0690	
Hazard Assessment	3	An expert 3	0.0000	
	4	An expert 4	0.1120	
Exporte 2 E 7 0 and	5	An expert 5	0.0000	
Experts 3, 5, 7, 9 and	6	An expert 6	0.2870	
that are rationally	7	An expert 7	0.0000	
coherent:	8	An expert 8	0.2870	
	9	An expert 9	0.0060	
the high p-values for the	10	An expert 10	0.1120	
others suggest random	11	An expert 11	0.0020	
slide)			ОК	
(abrisk				University of BRISTOL

	_	In	Char day	e	-	0.1	C	lot-	levia	lenned.
		Experts	Circular	Gas	Timesca	Petroge	Geophy	Observ	Pield	Commun
	1	An expe	8	4	1	4	2	5	2	3
ard	2	An expe	10	6	0	7	5	4	3	8
	3	An expe	0	2	1	0	5	3	4	6
essment	4	An expe	7	2	4	4	3	4	5	5
	5	An expe	0	6	4	1	2	3	0	5
	6	An expe	8	2	2	2	3	2	5	5
e verv low	7	An expe	0	4	1	0	6	5	3	2
ff of	8	An expe	8	2	4	1	2	4	3	5
amont and	9	An expe	3	4	3	0	6	2	3	6
	10	An expe	9	5	7	4	6	5	5	4
p-value for	11	An expe	2	7	6	0	4	1	6	3
up responses,	Total		55	44	33	23	44	38	39	52
I warning!!	Coeff. (of agreem	ient		Coeff. 0.1555	of conco	rdance	1	p-value	e (random data)

1 2 3	Item name Gas Timescales	Score 0.5736	St. dev.		
1 2 3	Gas Timescales	0.5736	0.2449		
2	Timescales				
3	1 1 1 2 1 0 2 1 1 1 2 1	0.4890	0.2601		
	Petrogenesis	0.2820	0.2276		
4	Geophys	0.5032	0.2888		
5	Observatories	0.5677	0.2618		
6	Field	0.5068	0.3359		
7	Communication	0.6788	0.2595		
28	0.35 0.44 	0.52	Entropy 2.3348		
	5 6 7 28 4 3	5 Observatories 6 Field 7 Communication 28 0.36 0.44 ↓ ↓ ↓ 3 ↓ ↓	5 Observatories 0.5677 6 Field 0.5068 7 Communication 0.6788 28 0.36 0.44 0.52 1 1 1 1 1 3 2 46 2 46		



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Research	Experts						
		Expert's nickname	p-value	Expert's description			
Experts 2, 3, 5, 6,	1	Person 1	0.1120				
7, 11, 12 provide	2	Person 2	0.0000				
ion-random	3	Person 3	0.0000				
choices	4	Person 4	0.5530				
	5	Person 5	0.0020				
Expert 4's responses are almost totally random	6	Person 6	0.0330				
	7	Person 7	0.0060				
	8	Person 8	0.0690				
	9	Person 9	0.1120				
	10	Person 10	0.1120				
	11	Perwson 11	0.0060				
lote: experts are	12	Person 12	0.0020				
are order as for azard issessment esponses			~				

	Por	-		• P	refere	ence	matr	ix		
)		Experts	Circular	Gas	Timesca	Petroge	Geophy	Observa	Field	Commun
kesearch	1	AN Othe	8	1	1	5	2	6	7	5
lthough	2	AN Othe	10	3	6	6	1	0	2	6
greement	3	Emma K	0	4	5	6	3	0	1	2
oeff is quite	4	Melissa	7	3	4	3	4	6	4	3
ow,	5	Benoit	1	6	3	1	5	3	3	0
ne aroun's	6	PDC	8	1	4	5	4	0	3	4
anking	7	Marie	2	6	5	6	5	1	4	0
hoices do not	8	Richie	8	2	4	6	4	1	2	2
ppear	9	John P	3	4	2	3	5	1	7	5
andom	10	тс	9	5	7	8	3	5	2	3
	11	MH	1	5	5	4	5	2	4	2
P = 0.035	12	AN Othe	1	6	7	8	2	1	3	0
	Total		58	46	53	61	43	26	42	32
	Coeff. o 0.0548	fagreem	lent		Coeff. 0	of conco	dance]	p-value 0.0354	(random data)

		Probab	oilistic inversion	1
Research				lat day
		Item name	score	St. dev.
Relative ranking scores	1	Gas	0.5414	0.2730
	2	Timescales	0.6144	0.2720
and variances	3	Petrogenesis	0.6185	0.2810
	4	Geophys	0.5288	0.2624
	5	Observatories	0.3119	0.2400
	6	Field	0.4686	0.2666
	7	Communication	0.4127	0.2972
				Entropy 1.007
	31	0.37 0.43	0.50	0.56
	5	7	6	4 1







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€ R ti	esults from paired comparison PI o ransmission risks	of twelve <i>vC</i> .	ID
	Transmission Route	Score	St. dev.
1	Platelet transfusion	0.5599	0.2318
2	FFP plasma transfusion	0.6266	0.2501
3	Whole blood transfusion	0.7384	0.2075
4	Dura Mater transplant	0.9520	0.0370
5	Packed red blood cells	0.6002	0.2742
6	Dental tissue graft	0.2756	0.2484
7	Corneal transplant	0.6953	0.2263
8	Hematopoietic stem cell transplant	0.3197	0.1752
9	Human derived urine fertility products	0.3160	0.2034
10	Bone marrow transplant	0.4966	0.2195
11	pdFVIII	0.4353	0.2524
12	pdFXI	0.3992	0.2340
7	Nonental Ali Assaudi certe	23	BRISTOL



