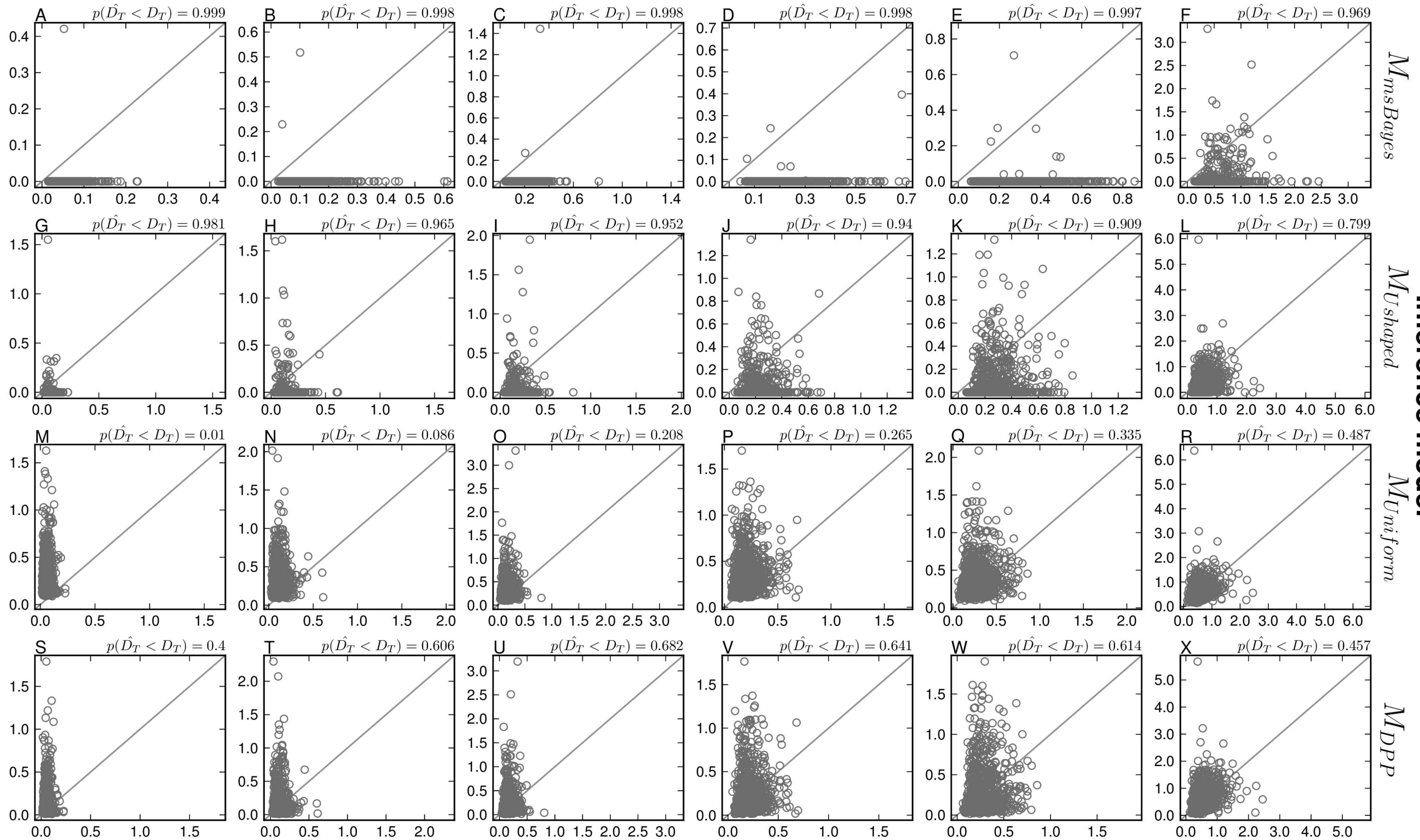# Data model $\mathcal{M}_{Exp}$

$\tau \sim Exp(\text{mean} = 0.14\,\text{MGA})$ $\tau \sim Exp(\text{mean} = 0.29\,\text{MGA})$ $\tau \sim Exp(\text{mean} = 0.43\,\text{MGA})$ $\tau \sim Exp(\text{mean} = 0.58\,\text{MGA})$ $\tau \sim Exp(\text{mean} = 0.72\,\text{MGA})$ $\tau \sim Exp(\text{mean} = 1.44\,\text{MGA})$

Row $\mathcal{M}_{msBayes}$:
A $p(\hat{D}_T < D_T) = 0.999$ B $p(\hat{D}_T < D_T) = 0.998$ C $p(\hat{D}_T < D_T) = 0.998$ D $p(\hat{D}_T < D_T) = 0.998$ E $p(\hat{D}_T < D_T) = 0.997$ F $p(\hat{D}_T < D_T) = 0.969$

Row $\mathcal{M}_{Ushaped}$:
G $p(\hat{D}_T < D_T) = 0.981$ H $p(\hat{D}_T < D_T) = 0.965$ I $p(\hat{D}_T < D_T) = 0.952$ J $p(\hat{D}_T < D_T) = 0.94$ K $p(\hat{D}_T < D_T) = 0.909$ L $p(\hat{D}_T < D_T) = 0.799$

Row $\mathcal{M}_{Uniform}$:
M $p(\hat{D}_T < D_T) = 0.01$ N $p(\hat{D}_T < D_T) = 0.086$ O $p(\hat{D}_T < D_T) = 0.208$ P $p(\hat{D}_T < D_T) = 0.265$ Q $p(\hat{D}_T < D_T) = 0.335$ R $p(\hat{D}_T < D_T) = 0.487$

Row $\mathcal{M}_{DPP}$:
S $p(\hat{D}_T < D_T) = 0.4$ T $p(\hat{D}_T < D_T) = 0.606$ U $p(\hat{D}_T < D_T) = 0.682$ V $p(\hat{D}_T < D_T) = 0.641$ W $p(\hat{D}_T < D_T) = 0.614$ X $p(\hat{D}_T < D_T) = 0.457$

Y-axis: Estimated variance of divergence times, $\hat{D}_T$

X-axis: True variance of divergence times, D_T

Right labels (Inference model): $\mathcal{M}_{msBayes}$, $\mathcal{M}_{Ushaped}$, $\mathcal{M}_{Uniform}$, $\mathcal{M}_{DPP}$