

## UNIVERSALLY OPTIMAL FMRI DESIGNS FOR COMPARING HEMODYNAMIC RESPONSE FUNCTIONS

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### Supplementary Material

A list of fMRI designs of length  $N$  ( $\leq 600$ ) that are obtained via Paley difference sets is provided. These designs are universally optimal for comparing two HRFs of length  $K \leq G + 1$ .

N	G	Design
4	1	1 2 2 1
8	2	1 2 1 2 2 2 1 1
12	3	1 2 2 2 1 2 2 1 2 1 1 1
20	4	1 2 1 2 1 2 2 2 2 1 1 2 2 1 2 2 1 1 1 1
24	4	1 2 1 2 1 1 2 2 1 1 2 2 1 2 1 2 2 2 2 1 1 1 1
32	4	1 2 2 2 1 2 1 2 1 1 1 2 2 2 2 1 2 2 1 2 2 2 1 1 2 1 1 1 1
44	5	1 2 2 2 1 2 1 1 1 2 2 2 2 2 1 2 2 2 1 1 2 1 2 1 2 2 1 2 2 1 2 1 2 2 1 1 1 2 1 1 1 1 1
48	4	1 2 1 1 1 1 2 2 1 2 1 2 1 1 1 2 2 1 2 2 1 1 2 1 1 2 2 2 1 2 1 2 1 1 2 2 2 1 2 2 2 2 2 1 1 1 1
60	5	1 2 2 2 2 2 1 1 2 2 2 2 1 2 2 2 1 1 2 1 2 1 2 1 2 2 2 1 2 2 2 1 2 1 1 1 2 1 2 1 2 2 1 2 2 1 1 1 2 1 1 1 2 2 1 1 1 1 1
68	6	1 2 2 1 2 2 2 1 2 1 1 1 2 1 1 2 2 2 2 2 1 2 1 2 2 2 2 1 1 1 2 2 1 1 2 1 2 1 1 2 2 1 2 2 1 2 1 2 2 1 1 2 2 2 1 1 1 1 2 1 2 1 1 1 1 1
72	6	1 2 1 1 1 2 1 2 2 1 1 2 1 1 1 2 2 2 1 1 2 1 2 1 1 2 1 2 2 2 1 1 1 2 1 2 2 1 2 1 2 2 1 1 1 2 2 2 1 2 2 2 1 1 2 1 2 2 2 1 2 2 2 2 2 1 1 1 1 1 1
80	6	1 2 1 1 2 2 2 2 1 1 2 2 2 1 2 1 2 1 2 1 1 1 2 2 2 1 1 1 1 2 2 1 2 2 2 2 2 1 2 1 1 2 1 2 2 2 2 1 1 2 2 1 2 2 2 1 1 2 1 2 2 1 1 1 1 2 1 2 2 1 2 1 1
84	7	1 2 1 2 2 1 1 1 2 1 1 2 2 1 2 2 2 1 1 2 1 2 2 2 2 2 1 2 1 2 1 1 1 2 2 1 1 1 2 2 2 2 1 2 1 1 2 2 1 2 2 1 2 1 1 2 2 1 2 1 1 1 2 2 2 1 1 2 2 2 1 2 1 2 1 1 1 1 1 1 1
104	7	1 2 2 2 1 2 1 1 2 1 1 1 2 1 1 2 1 1 2 1 2 1 2 1 2 2 2 1 2 2 2 1 2 2 2 1 1 2 1 2 2 1 1 2 1 1 1 1 2 1 1 2 1 2 1 2 2 2 1 2 2 2 1 2 2 1 2 1 1 1 2 2 2 2 2 1 1 1 2 2 2 1 1 2 1 2 2 2 1 1 2 1 2 2 1 1 1 2 2 2 1 1 1 1 1 1 1 1















