

$$N = 213 = 3 \cdot 71$$

By the Ibukiyama-Kitayama dimension formula,
 $\dim(S_4(K(213))) = 104$

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
the lift dimension of $S_4(K(213))^+$ is 38
the nonlift dimension of $S_4(K(213))^+$ is heuristically 53
 $\dim(S_4(K(213))^+)$ thus is heuristically 91
 $\dim(S_4(K(213))^-)$ is heuristically 13

The heuristic dimensions are correct by the spanning results to follow

$\dim(J_{\{2,213\}}^{\{\text{cusp}\}}) = 4$ (Skoruppa-Zagier), so need to span to within 3 dimensions

$q = 5$ for TraceDown

After TD($\text{Grit}(J_{\{4,1065\}}^{\{\text{cusp}\}})$) and $(\text{Grit}(J_{\{2,213\}}^{\{\text{cusp}\}}))^2$,
spanned rank in $S_4(K(213))^+$ is 91
spanned rank in $S_4(K(213))^-$ is 0

Hecke operators applied: $\{\{3, 2\}\}$

After Hecke spreading,
spanned rank in $S_4(K(213))^-$ is 4

After Borcherds products,
spanned rank in $S_4(K(213))^-$ is 13

Final spanned rank in $S_4(K(213))^+$ is 91

Final spanned rank in $S_4(K(213))^-$ is 13

$S_2(K(213))$ is determined by Jacobi restriction and the $H4Ndd(2,+)$ test
($H_4(213,2,2)^+ = 0$)

So $S_2(K(213)) = \text{Grit}(J_{\{2,213\}}^{\{\text{cusp}\}})$ (dimension 4)