Table 1: Data of certain bosonic $\mathcal{W}$-algebras related to the ADE classification

$\mathcal{W}$-algebra	$H_{c(p,q)}$
$\mathcal{W}(2)$ p,q prime	$\{h(p,q,r,s) \mid r=1,\ldots,q-1,\ (2,r)=1,$ $s=1,\ldots,p-1\}$
$\mathcal{W}(2,\frac{(m-1)(q-2)}{2})$ $p=2m$ q,m prime	$\{h(p,q,r,s) \mid r=1,\ldots,(q-1)/2,$ $s=1,\ldots,m,\ (2,s)=1\}$
$\mathcal{W}(2,q-3)$ $p=12,\ q\geq 5$ q prime	$\{\min(h(p,q,r,1),h(p,q,r,7)) \mid r=1,\ldots,(q-1)/2\}\cup$ $\{\min(h(p,q,r,5),h(p,q,r,11)) \mid r=1,\ldots,(q-1)/2\}\cup$ $\{h(p,q,r,4) \mid r=1,\ldots,(q-1)/2\}$
$\mathcal{W}(2,q-5)$ $p=30,\ q\geq 7$ q prime	$\{\min(h(p,q,r,1),h(p,q,r,11)) \mid r=1,\ldots,(q-1)/2\}\cup$ $\{\min(h(p,q,r,7),h(p,q,r,13)) \mid r=1,\ldots,(q-1)/2\}$

$c=c(p,q)=1-6\frac{(p-q)^2}{pq}, \qquad h(p,q,r,s)=\frac{(rp-sq)^2-(p-q)^2}{4pq}$

Table 2: Data of the six rational models with irreducible $\mathrm{SL}(2,\mathbb{Z})$-representation

$\mathcal{W}$-algebra	c	$\tilde{c}$	H_c
$\mathcal{W}_{G_2}(2,1^{14})$	$-\frac{8}{5}$	$\frac{16}{5}$	$\frac{1}{5}\{0,-1,1,2\}$
$\mathcal{W}_{F_4}(2,1^{26})$	$\frac{4}{5}$	$\frac{28}{5}$	$\frac{1}{5}\{0,-1,2,3\}$
$\mathcal{W}(2,4)$	$-\frac{444}{11}$	$\frac{12}{11}$	$-\frac{1}{11}\{0,9,10,12,14,15,16,17,18,19\}$
$\mathcal{W}(2,6)$	$-\frac{1420}{17}$	$\frac{20}{17}$	$-\frac{1}{17}\{0,27,30,37,39,46,48,49,50,$ $52,53,55,57,58,59,60\}$
$\mathcal{W}(2,8)$	$-\frac{3164}{23}$	$\frac{28}{23}$	$-\frac{1}{23}\{0,54,67,81,91,94,98,103,111,$ $112,116,118,119,120,122,124,$ $125,129,130,131,132,133\}$
$\mathcal{W}C_3$ $(\mathcal{W}(2,4,6))$	$-\frac{13}{15}$	$\frac{17}{15}$	$\frac{1}{180}\{0,-15,-8,-3,12,37,57,60,100,$ $117,120,132,145,252,285,405\}$

(Product Formulas). *Let c be one of values $-444/11$, $-1420/17$, $-3164/23$, and let l denote its denominator. For any integer x, relatively prime to l, set*

$$[x]_l = q^{l/24-(l-2x_0)^2/8l} \prod_{\substack{n\geq 1\\ n\equiv\pm x \bmod l}} (1-q^n)^{-1},$$

where x_0 is that integer which satisfies $1\leq x_0\leq (l-1)/2$, $x_0\equiv\pm x \bmod l$. Then the set of functions $\xi_{c,h}$ $(h\in H_c)$ equals

$$\begin{cases} \{\frac{\eta(q^l)}{\eta(q)}\frac{[4x]_l[5x]_l}{[x]_l},\ \frac{\eta(q^l)}{\eta(q)}[x]_l\}_{x=1,\ldots,(l-1)/2} & \textit{if} \quad l=11 \\ \{\frac{\eta(q^l)}{\eta(q)}\frac{[6x]_l[7x]_l[8x]_l}{[x]_l},\ \frac{\eta(q^l)}{\eta(q)}[x]_l[5x]_l\}_{x=1,\ldots,(l-1)/2} & \textit{if} \quad l=17 \\ \{\frac{\eta(q^l)}{\eta(q)}\frac{[8x]_l[9x]_l[10x]_l[11x]_l}{[x]_l},\ \frac{\eta(q^l)}{\eta(q)}[x]_l[5x]_l[7x]_l\}_{x=1,\ldots,(l-1)/2} & \textit{if} \quad l=23. \end{cases}$$

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