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Corrigendum: Mirror symmetry for extended affine Weyl groups
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CORRIGENDUM: MIRROR SYMMETRY FOR EXTENDED AFFINE WEYL GROUPS

by Andrea Brini & Karoline van Gemst

Abstract. — We correct an error in [1]. There was a typo in the exponent of one of the factors appearing in the expression of the Lyashko–Looijenga degrees in Corollary 5.2; the resulting wrong formula was then used in Table 5.1 to tabulate these degrees for all Dynkin types. We provide here the correct expressions for both Corollary 5.2 and Table 5.1.

The formula in the statement of [1, Cor.5.2] contains a computational error, whereby the exponent of \((\omega_k, \omega_k)\) in the numerator should have been \(\ell_R + 1\) (and not \(\ell_R\)). We give the rectified statement below.

Corollary 5.2. — The degree of the LL-map of the Hurwitz stratum \(M_{\omega}^{LG}\) is

\[
\frac{(\ell_R + 1)!((\omega_k, \omega_k)\ell_R + 1)}{\prod_{j=1}^{\ell_R}(\omega_j, \omega_k)}.
\]

The incorrect formula was used to tabulate the topological degrees for all Dynkin types other than \(A_\ell\) in Table 5.1. We correct those values in the table below.

Acknowledgements. — We became aware of an issue with the formula as presented in [1, Cor.5.2] after the appearance of [2]. We are very grateful to A. Takahashi for correspondence related to this.


Keywords. — Frobenius manifolds, mirror symmetry, integrable systems.

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http://jep.centre-nersanne.org/
Table 5.1. Lyashko–Looijenga degrees for all Dynkin types.

<table>
<thead>
<tr>
<th>$R$</th>
<th>$g_\omega$</th>
<th>$n_\omega$</th>
<th>$d_{g_\omega,n_\omega}$</th>
<th>$\ell_\omega(M_{DZ}^R)$</th>
<th>$\deg(LL)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A_\ell$</td>
<td>0</td>
<td>$(\ell - 1, \ell - 1)$</td>
<td>$\ell + 1$</td>
<td>$3\ell^{[\mu]}<em>{g</em>\omega,n_\omega}$</td>
<td>$(\ell + 1 - K)\ell^{\ell+1} - (\ell - K)\ell^{\ell}$</td>
</tr>
<tr>
<td>$B_\ell$</td>
<td>0</td>
<td>$(\ell - 2, \ell - 2, 1)$</td>
<td>$2\ell + 1$</td>
<td>$(3\ell^{[\mu]}<em>{g</em>\omega,n_\omega})^{\mu_2}$</td>
<td>$2(\ell + 1)(\ell - 1)^\ell$</td>
</tr>
<tr>
<td>$C_\ell$</td>
<td>0</td>
<td>$(\ell - 1, \ell - 1)$</td>
<td>$2\ell$</td>
<td>$(3\ell^{[\mu]}<em>{g</em>\omega,n_\omega})^{\mu_2}$</td>
<td>$(\ell + 1)^{\ell+1}$</td>
</tr>
<tr>
<td>$D_\ell$</td>
<td>0</td>
<td>$(\ell - 3, \ell - 3, 1, 1)$</td>
<td>$2\ell + 2$</td>
<td>$(3\ell^{[\mu]}<em>{g</em>\omega,n_\omega})^{\mu_2}$</td>
<td>$4\ell(\ell^2 - 1)(\ell - 2)^{\ell-1}$</td>
</tr>
<tr>
<td>$E_6$</td>
<td>5</td>
<td>$(5, 5, 2, 2, 2, 2)$</td>
<td>42</td>
<td>(A.1)</td>
<td>$2^4 \cdot 3^4 \cdot 5 \cdot 7$</td>
</tr>
<tr>
<td>$E_7$</td>
<td>33</td>
<td>$(11, 5, 3, 11, 5, 3, 1, 1, 3, 3)$</td>
<td>130</td>
<td>(A.2)</td>
<td>$2^{14} \cdot 3^4 \cdot 5 \cdot 7$</td>
</tr>
<tr>
<td>$E_8$</td>
<td>128</td>
<td>$(29, 29, 14, 14, 14, 14, 14, 14, 9, 9, 9, 5, 5, 4, 4, 4, 4, 4, 2, 2, 0, 0)$</td>
<td>518</td>
<td>[6, 7]</td>
<td>$2^5 \cdot 3^6 \cdot 5^6 \cdot 7$</td>
</tr>
<tr>
<td>$F_4$</td>
<td>4</td>
<td>$(5, 5, 2, 2, 2, 2)$</td>
<td>36</td>
<td>(3.40); $(M_{LG}{10000}_D)^{S_3}$</td>
<td>$2^4 \cdot 3^4 \cdot 5$</td>
</tr>
<tr>
<td>$G_2$</td>
<td>0</td>
<td>$(1, 1, 1)$</td>
<td>7</td>
<td>$(3.41); (M_{LG}{1000}_D)^{S_2}$</td>
<td>$2^3 \cdot 3^2$</td>
</tr>
</tbody>
</table>

References


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