Graph parameters and invariants of the orthogonal group
Regts, G.

Citation for published version (APA):
Regts, G. (2013). Graph parameters and invariants of the orthogonal group
Graph Parameters and Invariants of the Orthogonal Group–Errata

Guus Regts
Errata published on 10 December 2013

All references in this text are to the document ‘Graph Parameters and Invariants of the Orthogonal Group’.

p.17, l.4: $\sigma(u)$ should be $\sigma(v)$.
p.17, l.7: ‘term’ should be ‘factor’.
p.19, above and below (3.7): $G$ should be $G'$.
p.21, (3.13): $\phi(i)$ should be $\phi(e)$.
p.22, l.6: ‘maps’ should be ‘functionals’.
p.26, l.5: No comma before ‘denote’.
p.27, l.1 from Section 4.2: Add ‘group’ after ‘orthogonal’.
p.27, line above (4.4): $2m$ should be $m$.
p.29, l.10: There is a superfluous ‘(′ after ‘:′.
p.31, l.4: $S_n$ should be $S_m$.
p.31, l.6 below Theorem 4.3: End(V) should be End(W).
p.32, l.1: Replace ‘is’ by ‘induces’.
p.37, third line below (5.5): $\phi \circ \rho$ should be $\rho \circ \pi$.
p.38, l.-8: Remove ‘it’ after $f_{-2}$.
p.39, l.-4: Schur’s Lemma actually only implies that $S^\lambda \subseteq \text{Im} A_n$.
p.39, first line below (5.42): $y_{\phi(\delta(u) \cup \delta(s(v)))}$ should be $y_{\phi(\delta(u) \cup \delta(s(v)))}$.
p.40, in line 3 of (5.42): $[2l] \should be $[l]$.np.41, l.4: $\text{dim} \left( \text{span} \{ u_1, \ldots, u_n \} \right) = \text{dim} \left( \text{span} \{ w_1, \ldots, w_n \} \right)$ in the statement of Proposition 7.6.
p.42, in the proof of Theorem 6.15: Replace $\subseteq$ by $\supseteq$.
p.43, second and third line below the proof of Lemma 7.1: $C^k$ should be $C$ and $C$ should be $C^k$.
p.49, p.38: $p_{a,b}$ should be $p_{a,b}$.
p.50, add dim(span(\{u_1, \ldots, u_n\})) = dim(span(\{w_1, \ldots, w_n\})) in the statement of Proposition 7.6.
p.51: In the proof of Theorem 7.7 we assume that $u_1$ is orthogonal to all $u_i$, but this not completely correct. Here is fix: In case none of the $u_i$ is orthogonal to all of the $u_i$, we can find, by degeneracy, a nonzero linear combination of the $u_i$, which is orthogonal to all of the $u_i$, and call this $u_{n+1}$. Let $U = \text{span} \{ u_1, \ldots, u_n \}$ and write $U = U_{n+1} \oplus U'$ (for some algebraic complement $U'$ of $u_{n+1}$). Next we find for each $\varepsilon > 0$, $g(\varepsilon) \in O_k$ such that $g u_{n+1} = \varepsilon u_{n+1}$ by letting $g(\varepsilon)$ map $U'$ identically onto $U'$. Then $\lim_{\varepsilon \to 0} g(\varepsilon)(u_1, \ldots, u_n) = (u'_1, \ldots, u'_n)$ for certain $u'_i \in U$. Let $h' = \sum_{i=1}^n a_i ev_{u'_i}$.
Then \( \lim_{\varepsilon \to 0} g(\varepsilon) h_{\leq \varepsilon} = h'_{\leq \varepsilon} \). Hence by (7.6) \( h'_{\leq \varepsilon} \) is not contained in the orbit of \( h_{\leq \varepsilon} \) (as \( \dim(U') < \dim(U) \)). This implies that the orbit of \( h_{\leq \varepsilon} \) is not closed.

p.84, l.7: The term ‘graphon’ is first used in [7].

p.84, l.8: In fact an equivalence class of almost everywhere equal functions \( W \).

p.84, (8.3): \( W_H \) should be \( W_G \).

p.88/p.95: In Examples 8.2, 8.3 and 8.4 we implicitly use \( C = \mathbb{N} \).

p.90, l.4: There is a superfluous ‘a’ before ‘any’.

p.94: In (8.27) \( \pi_F \) should be \( \pi_H \) and in line 2 of (8.29) the sum is over \( \phi : E(H') \to C \).

**Acknowledgements**

I thank Tom Koornwinder for pointing out some of the errata.