

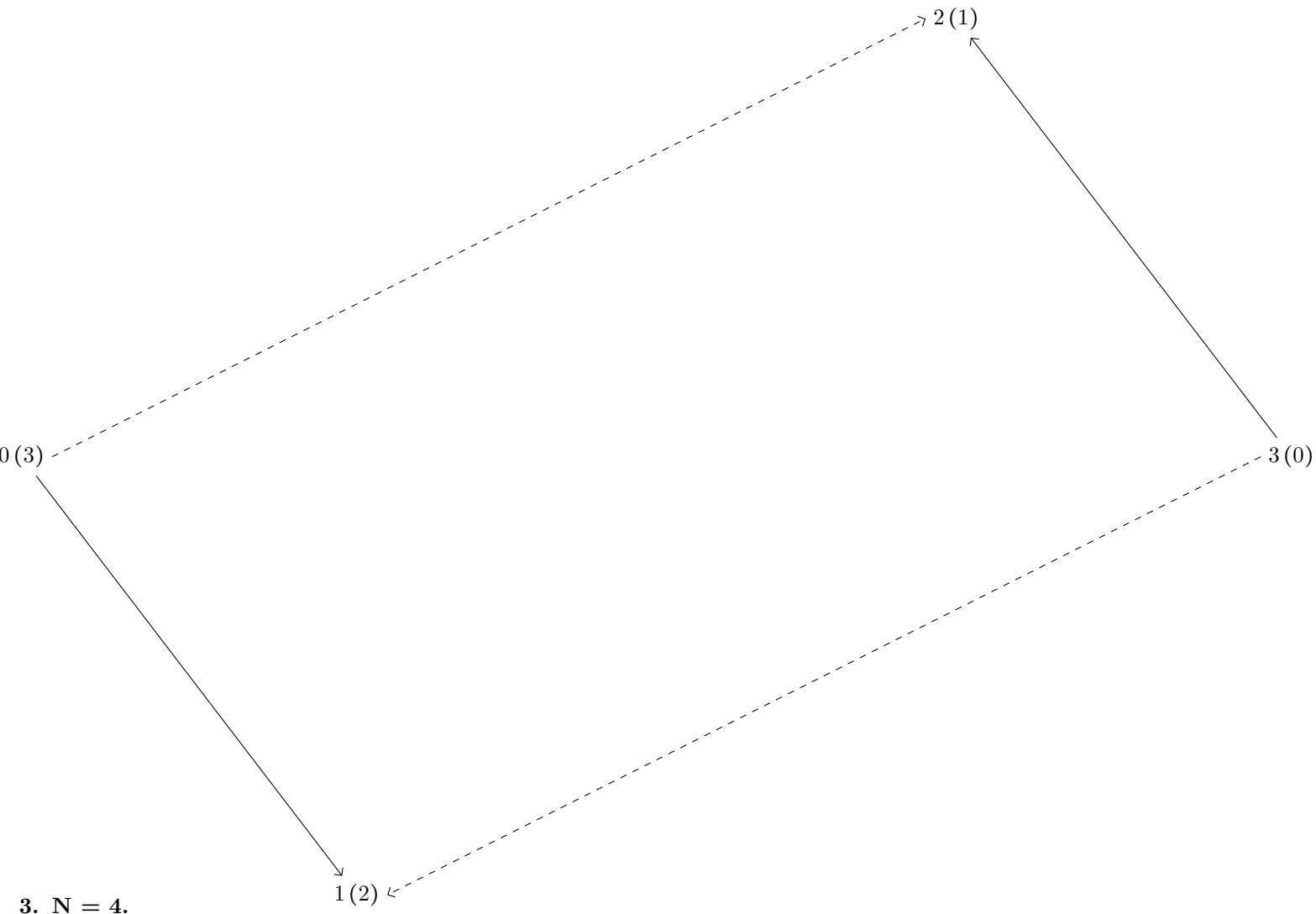
BIHEAP GRAPHS

MATTHEW GREGORY KRUPA

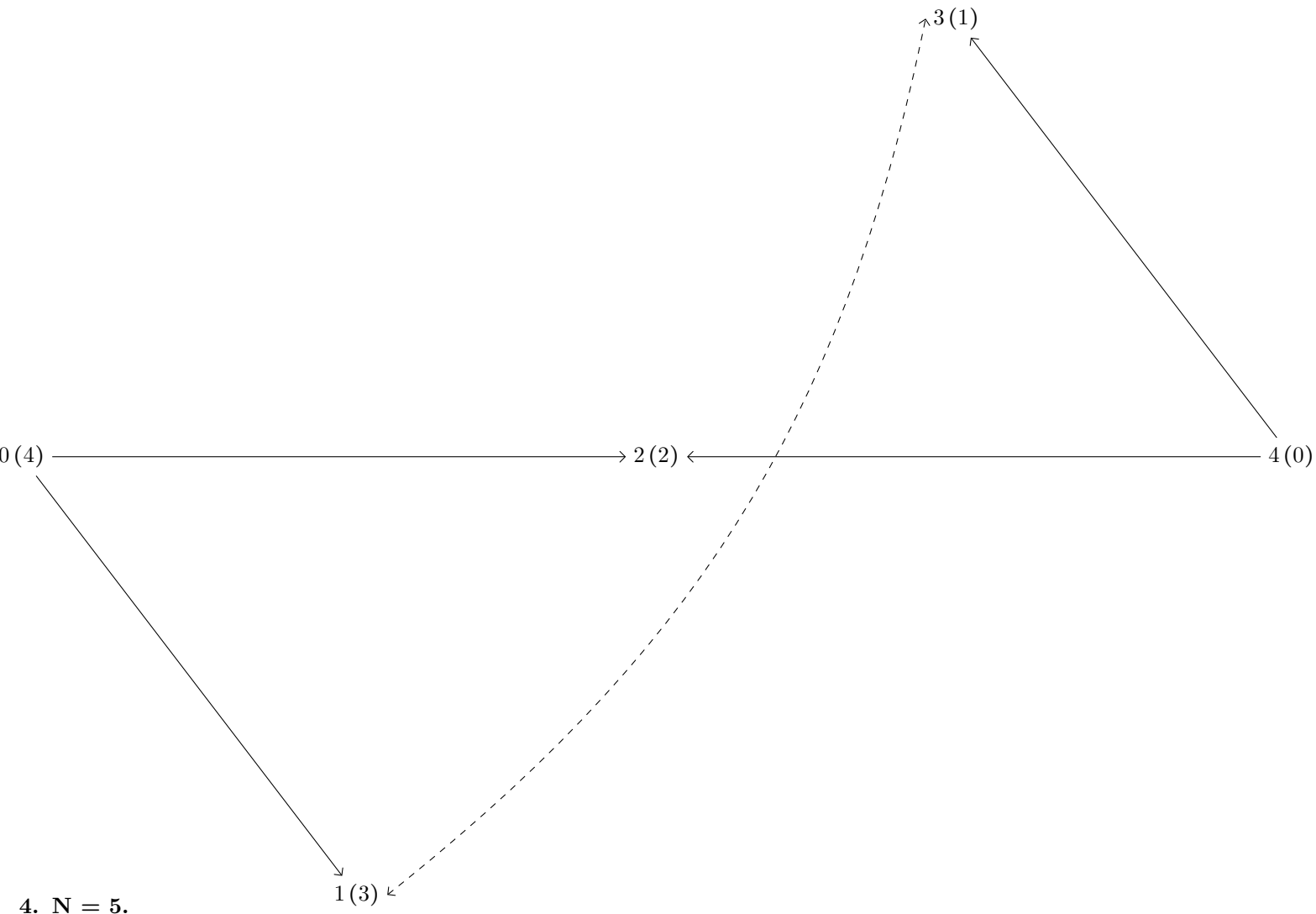
Contents

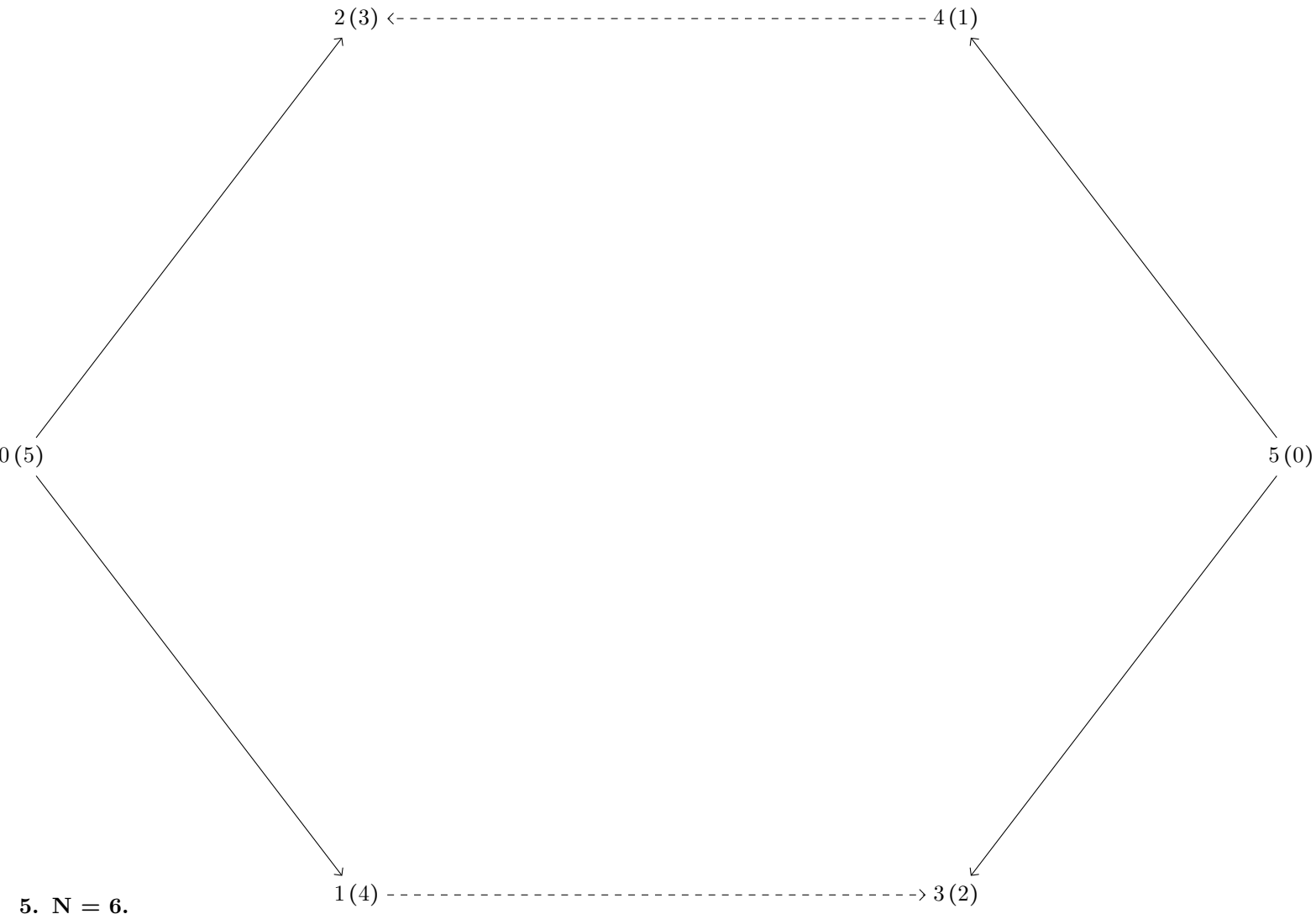
$0(1) \leftarrow \dots \rightarrow 1(0)$
1. $N = 2$.

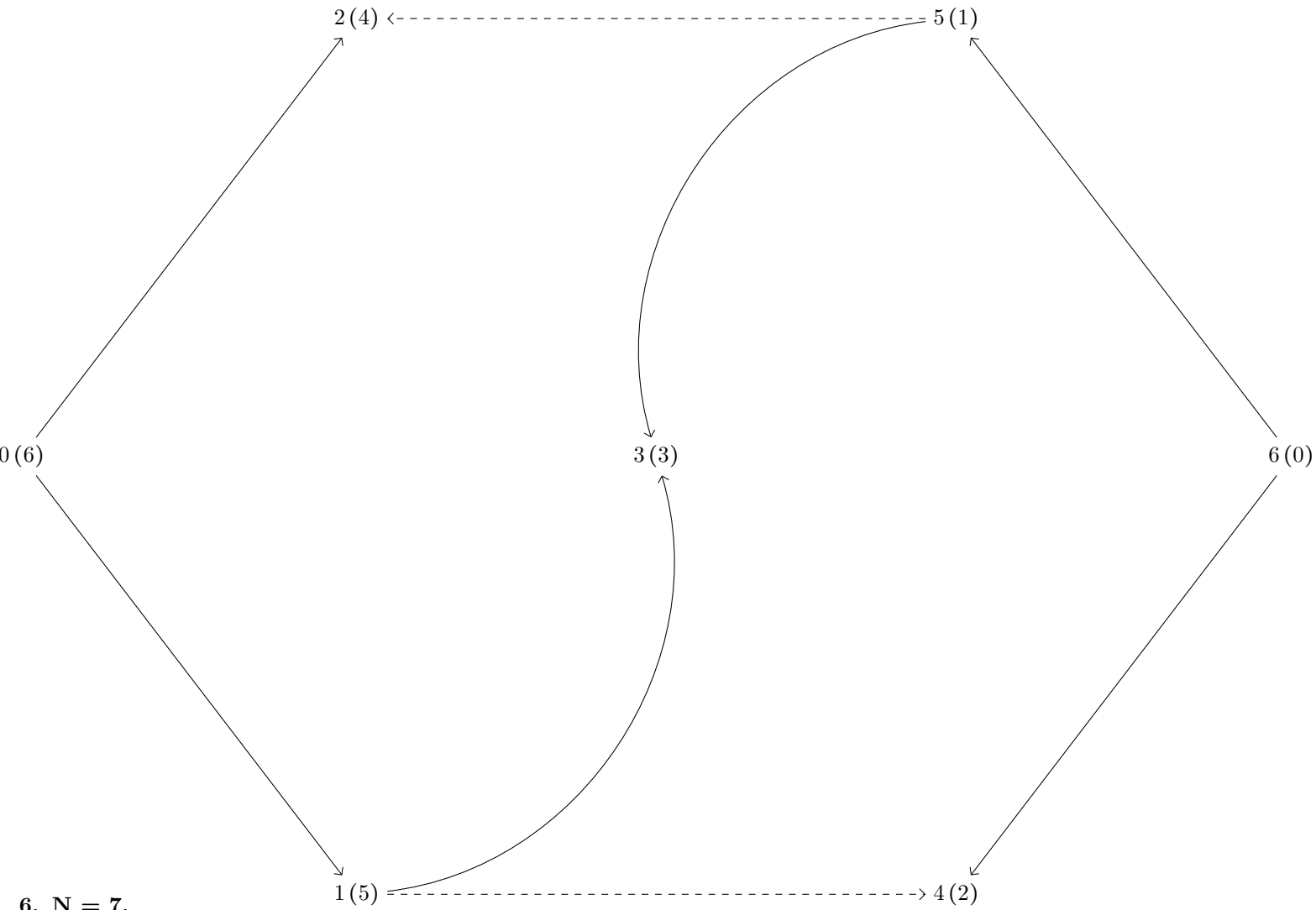
Keywords and phrases. Double ended heaps, Heaps, BiHeaps, QuickSelect, QuickSort, pivot, selection .

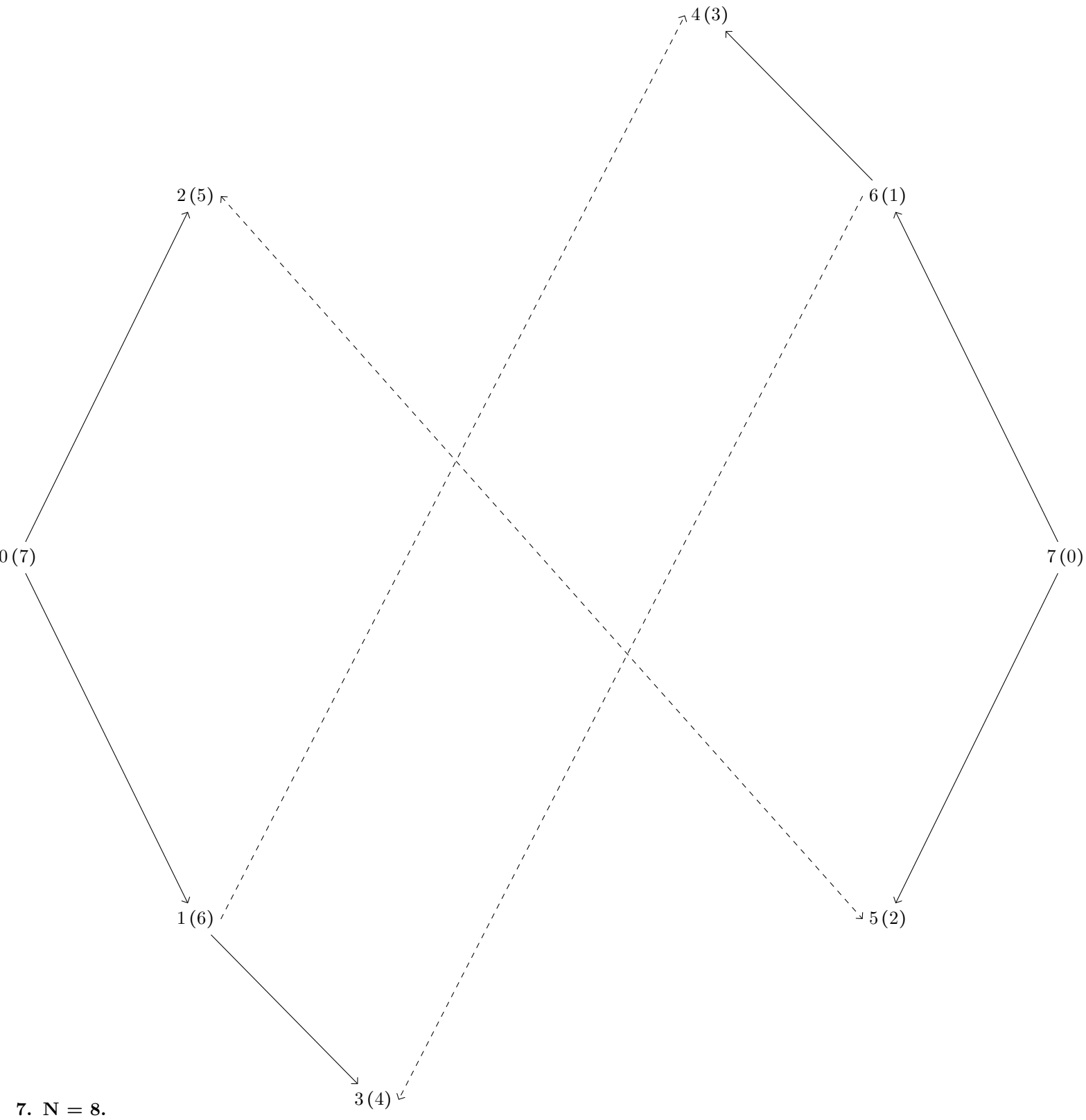


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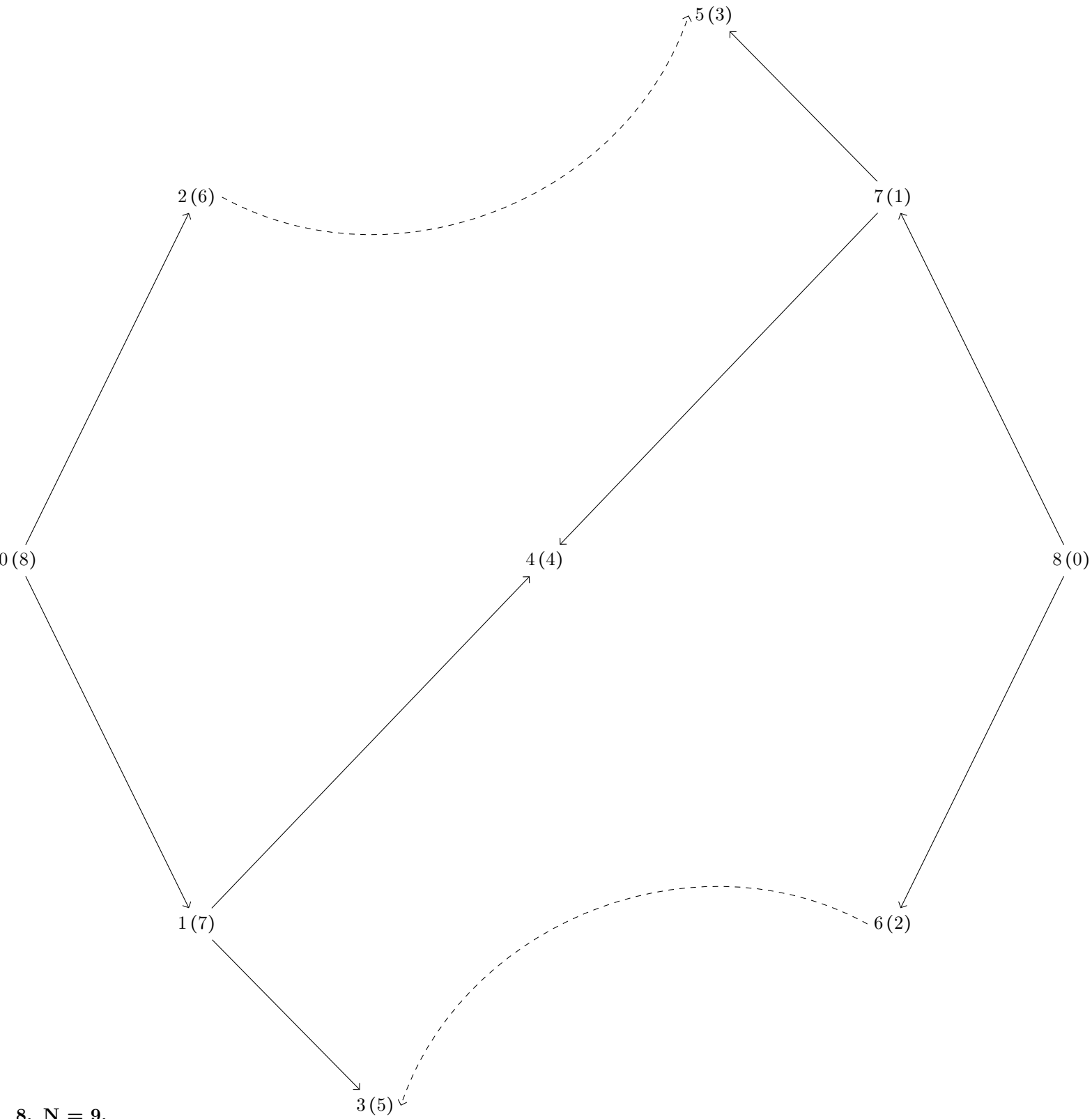


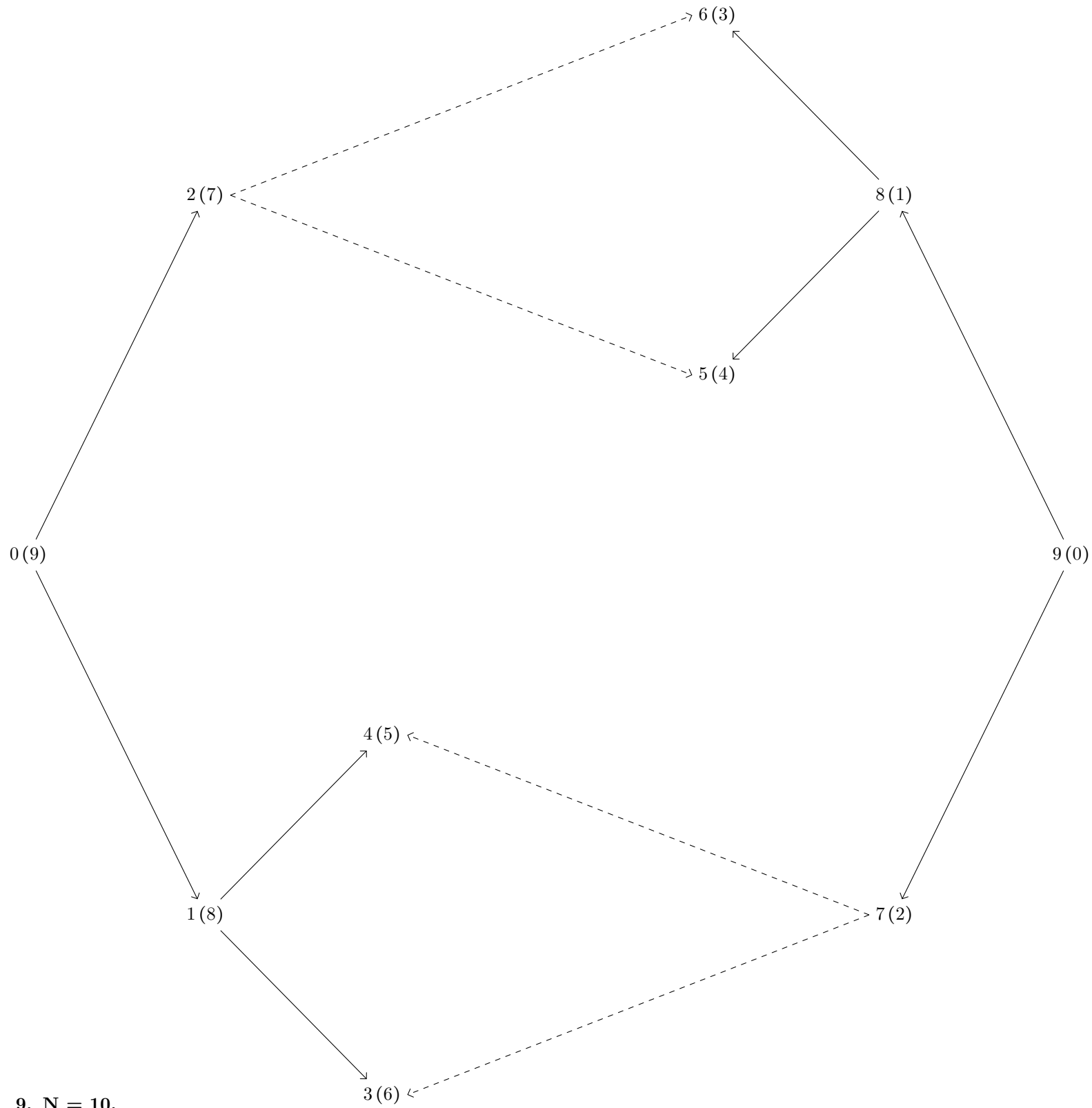




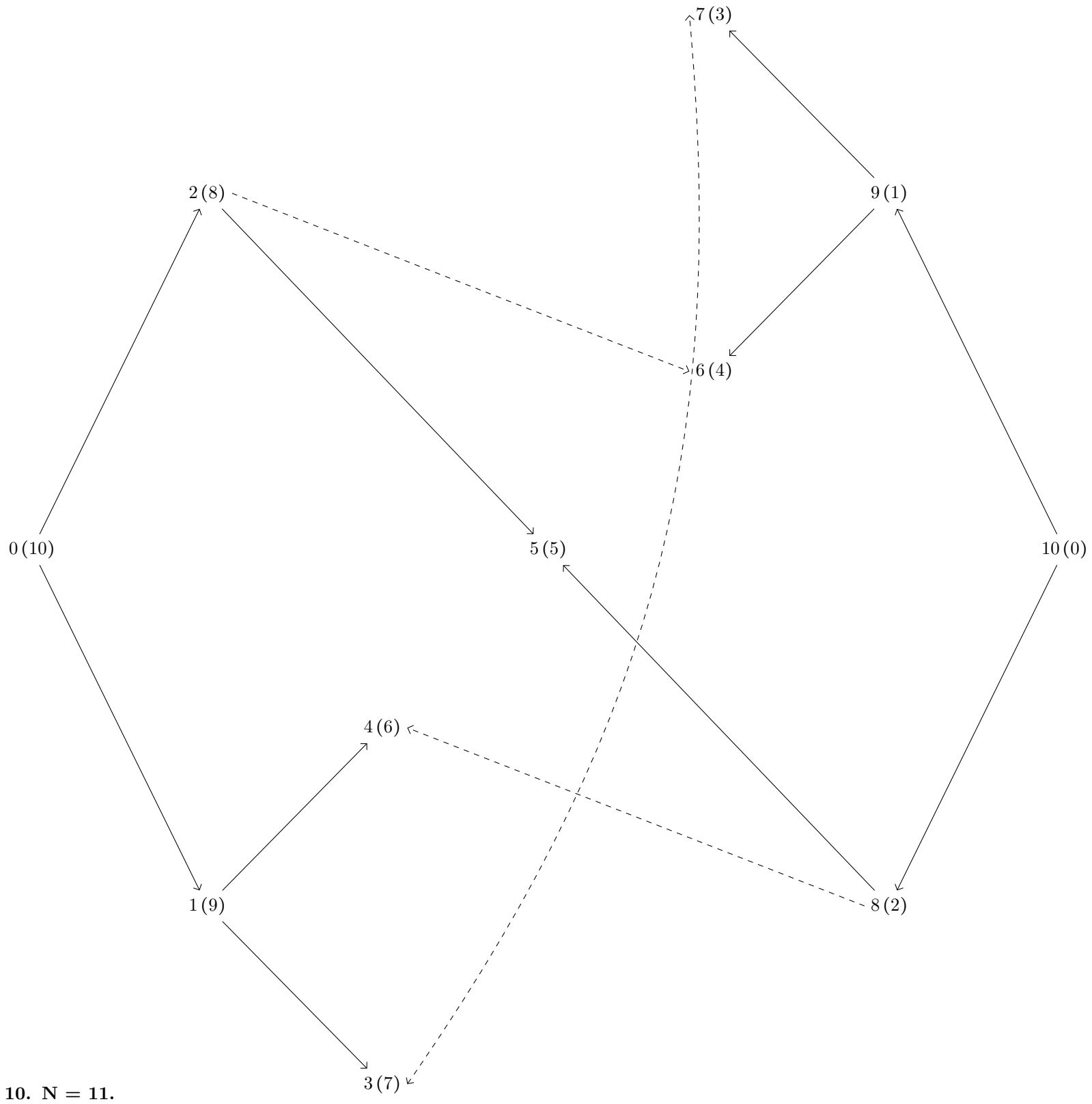


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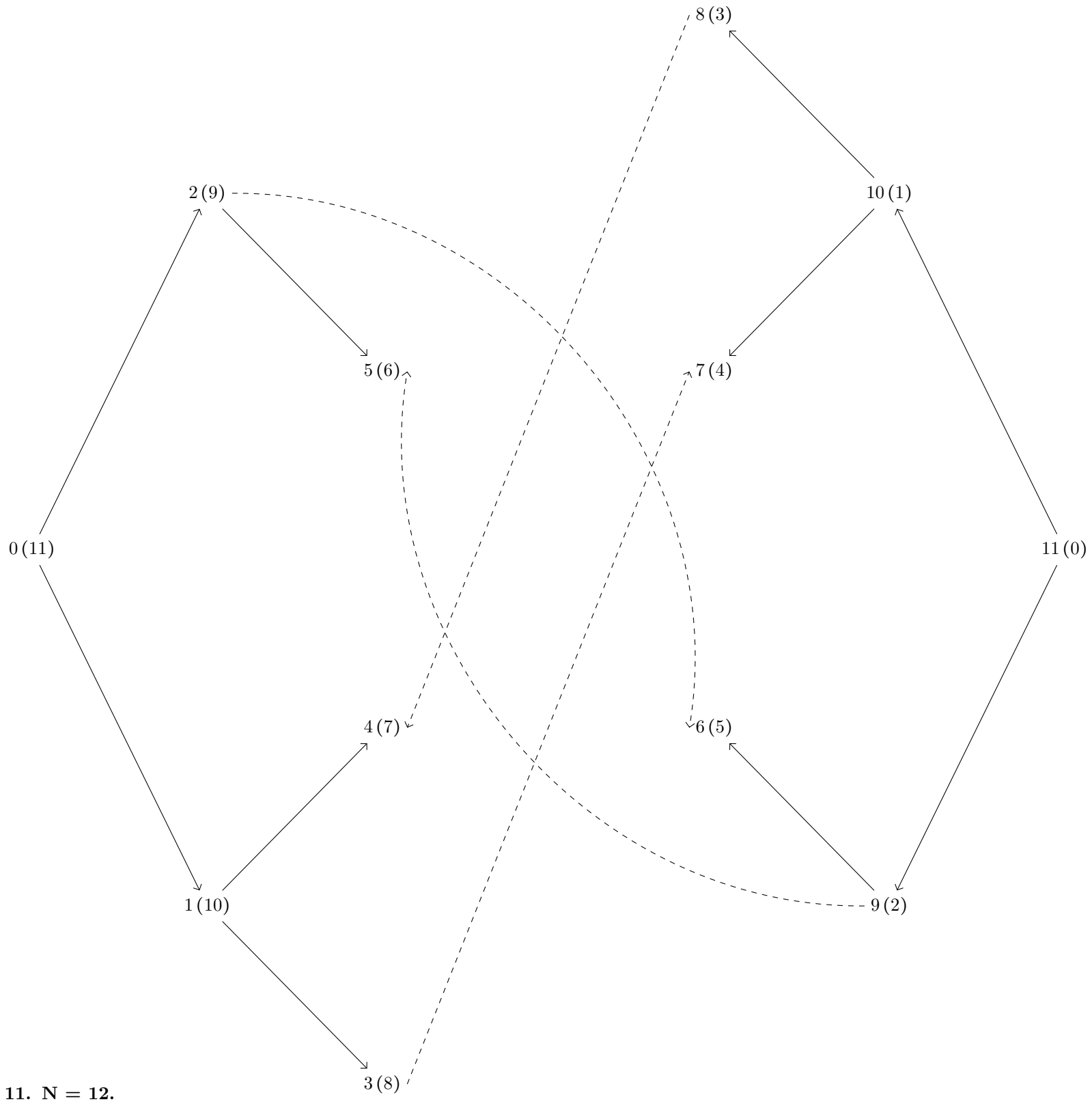




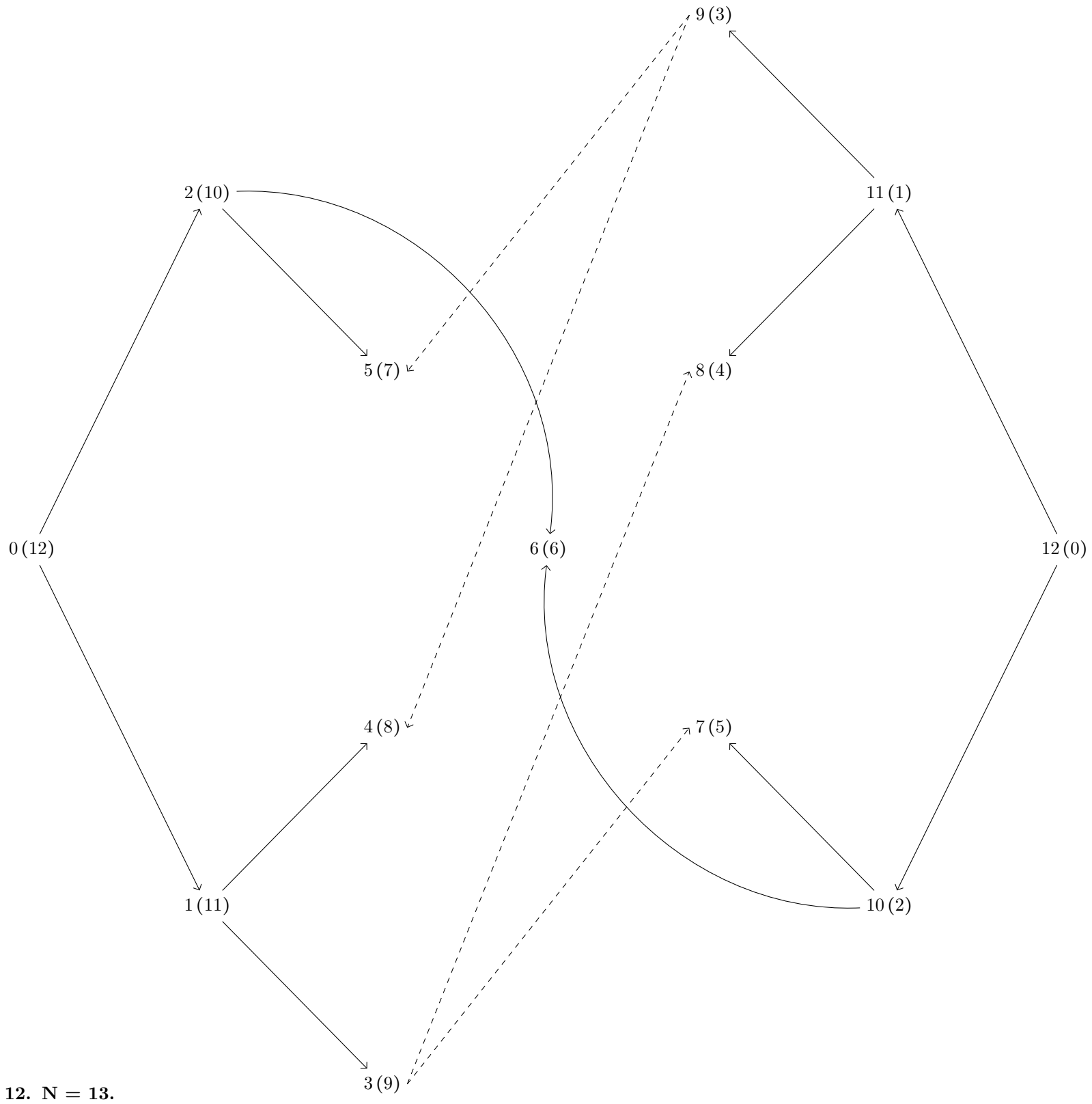
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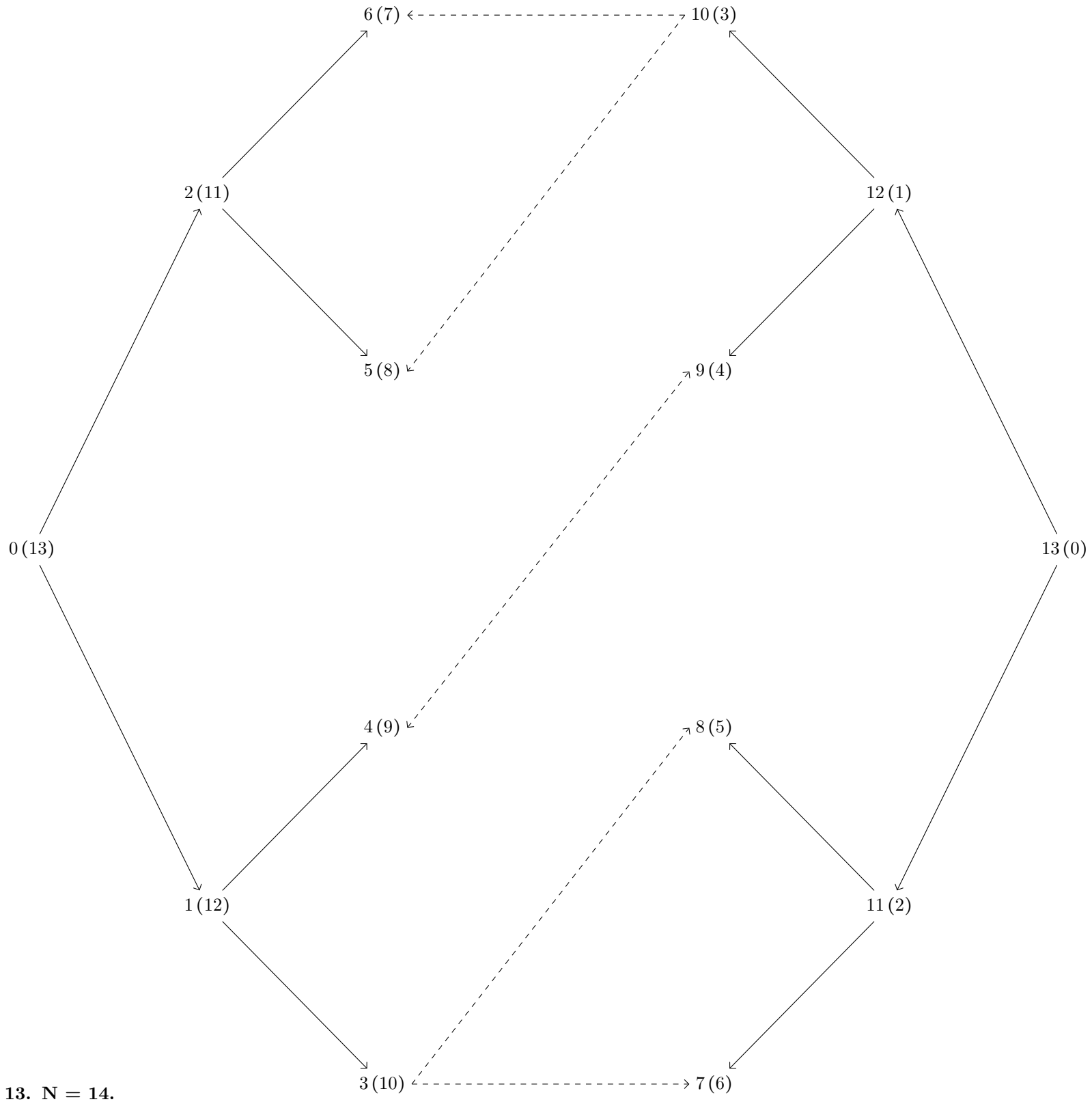
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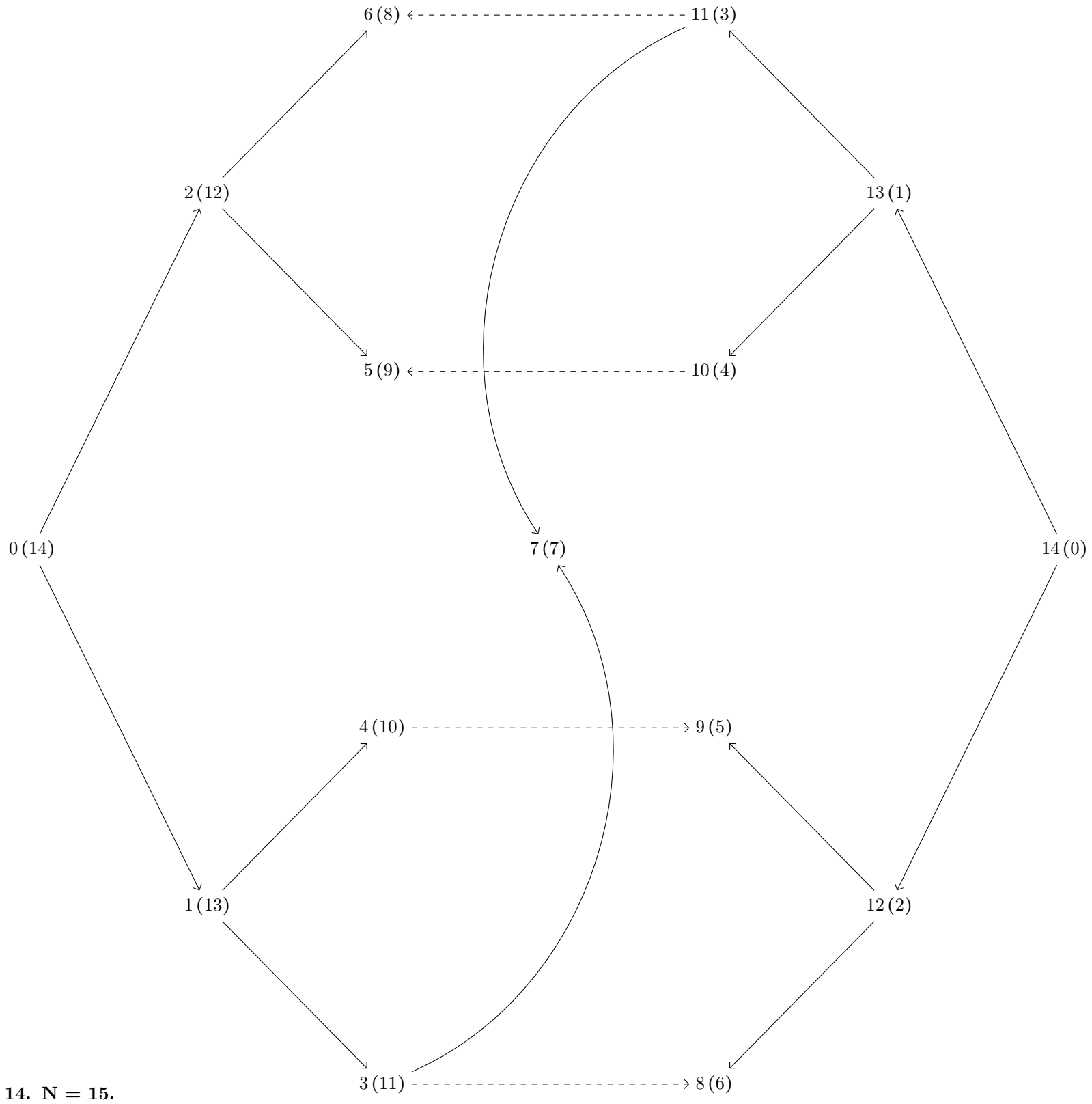
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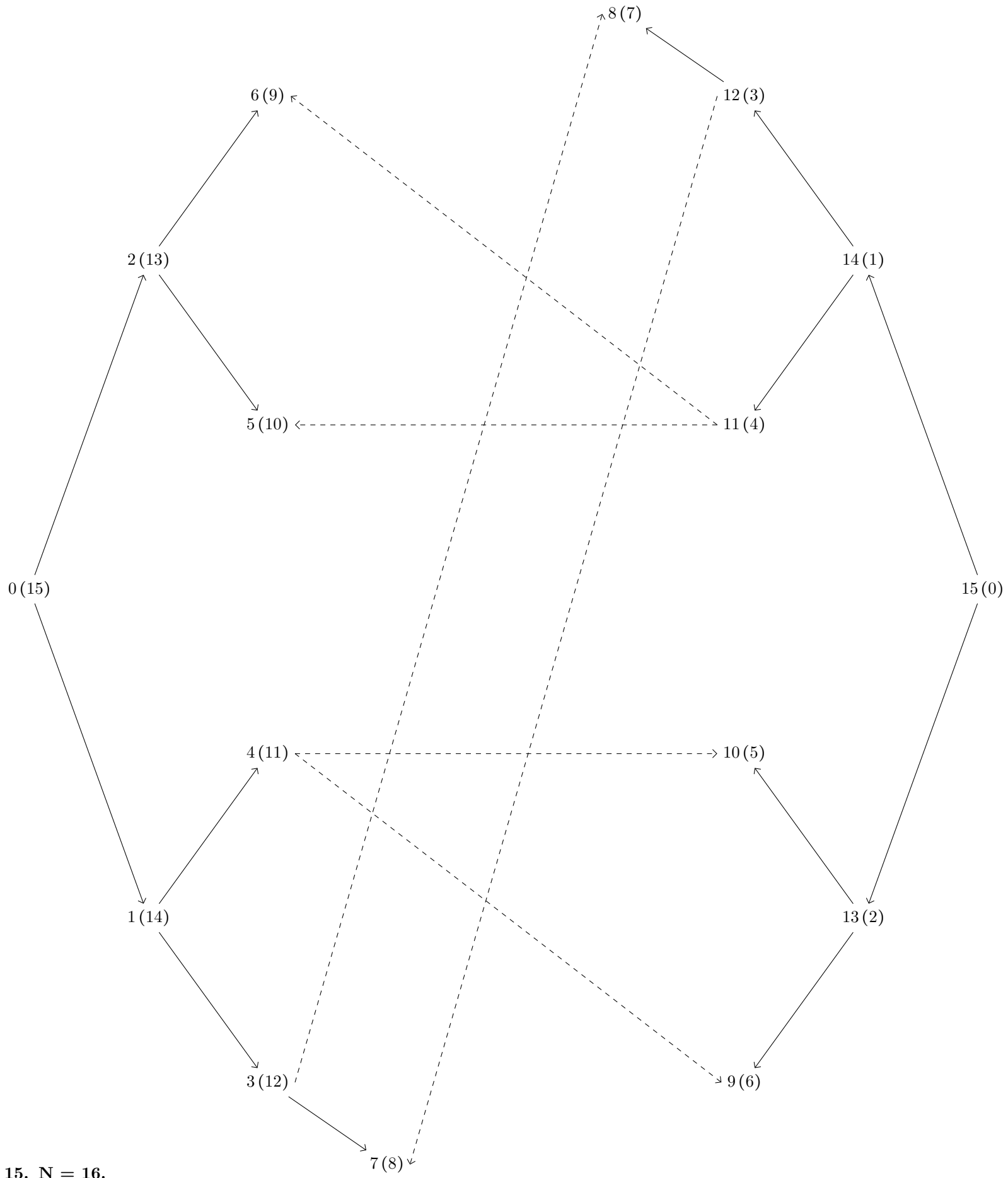
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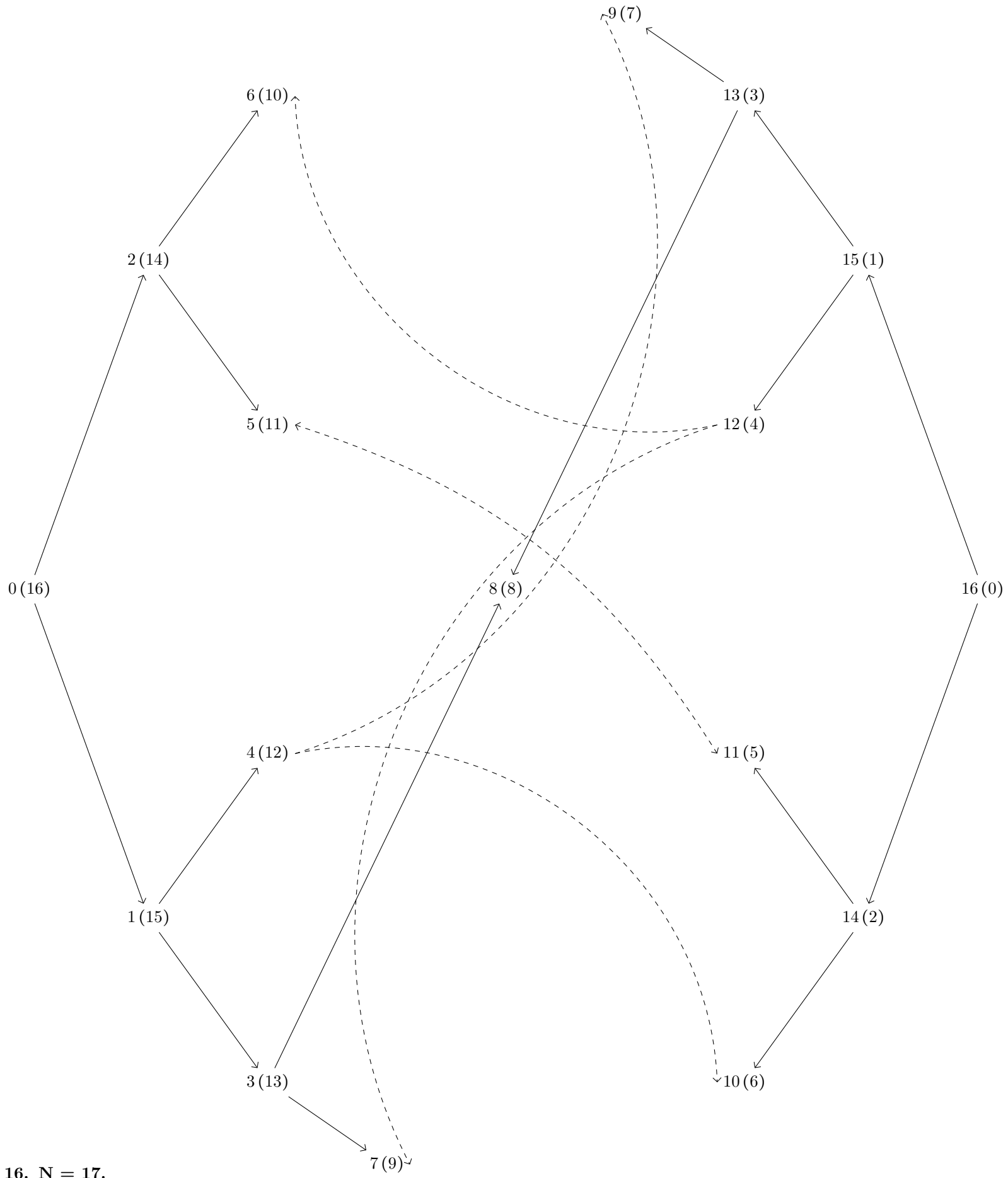


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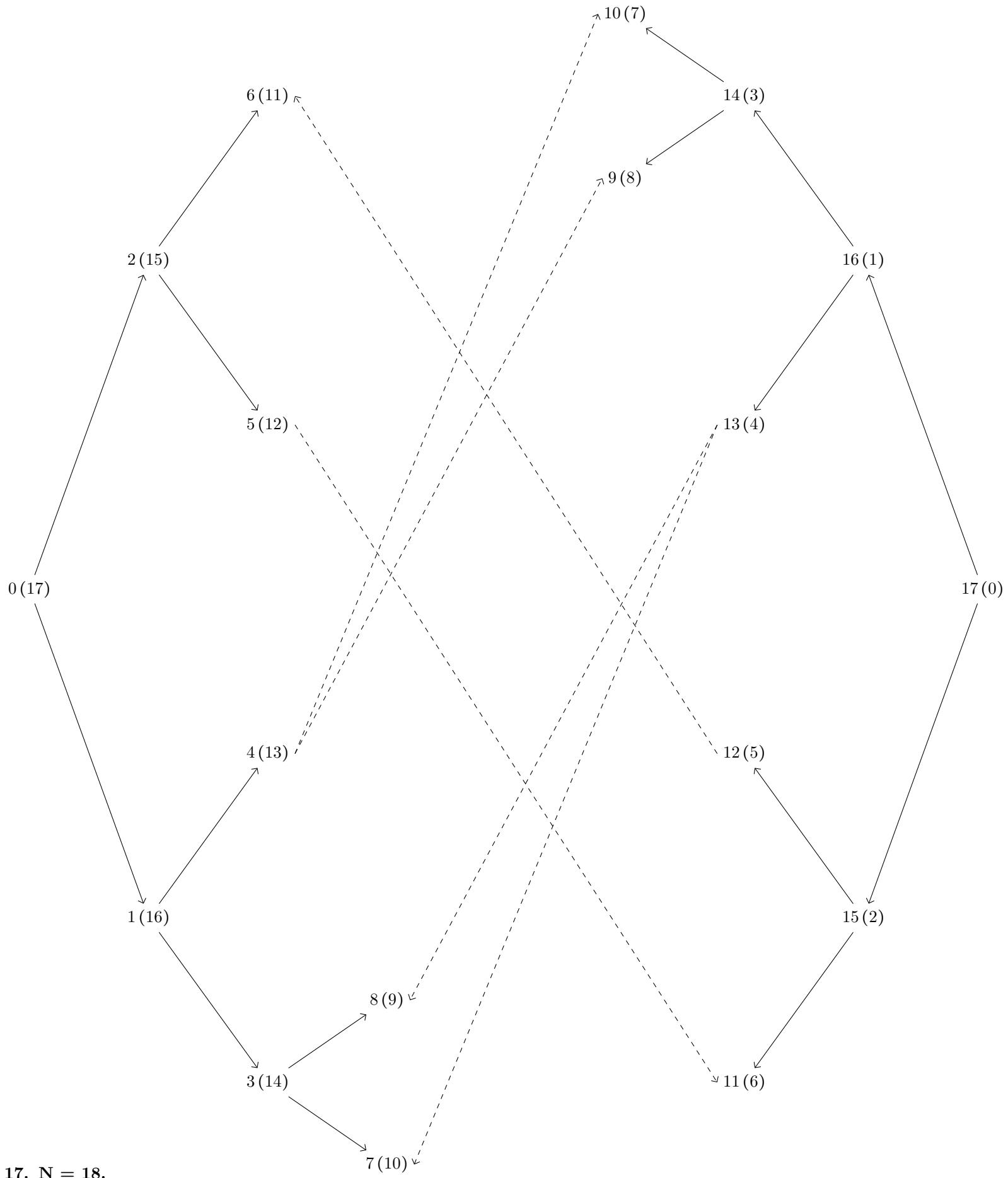


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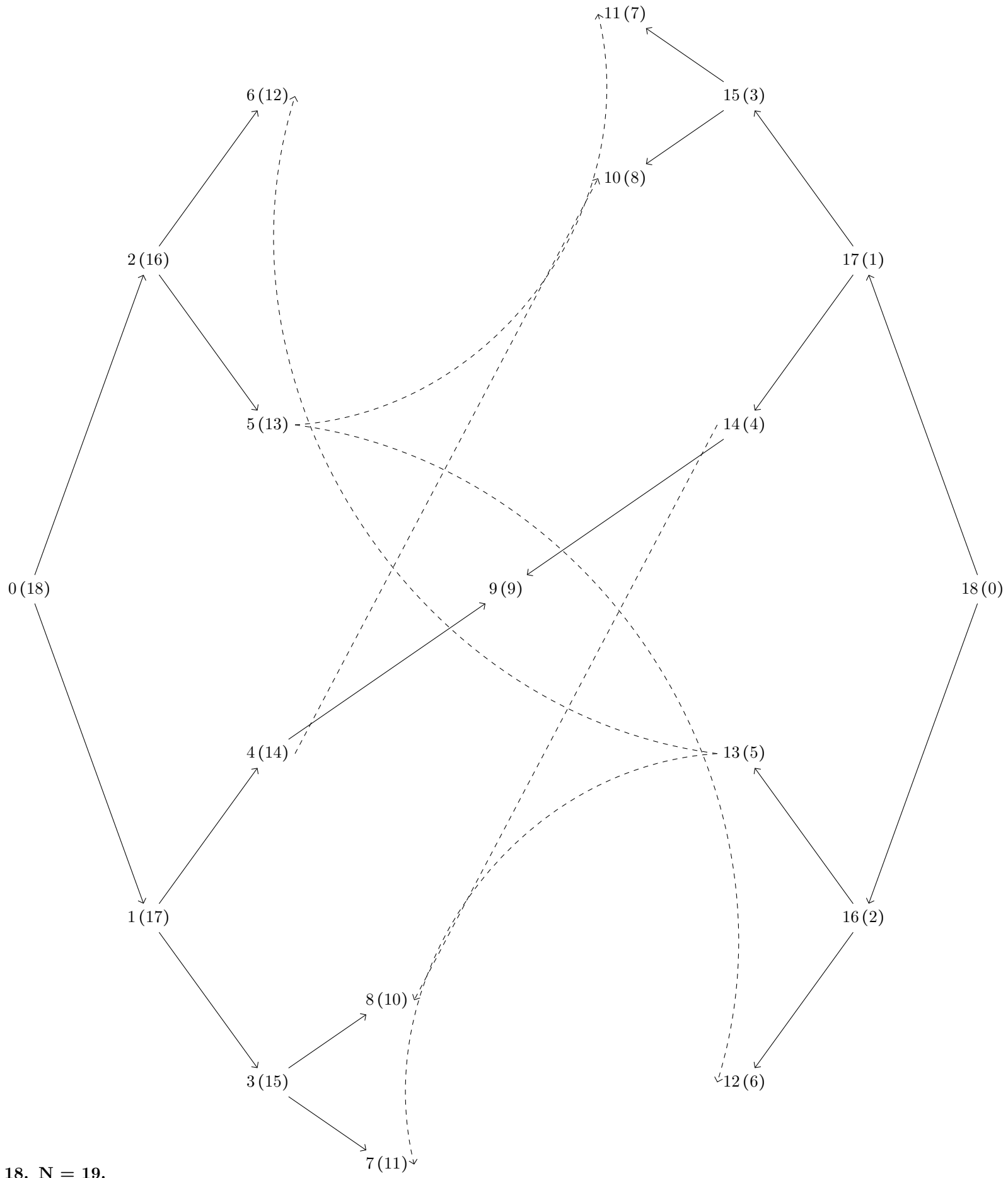




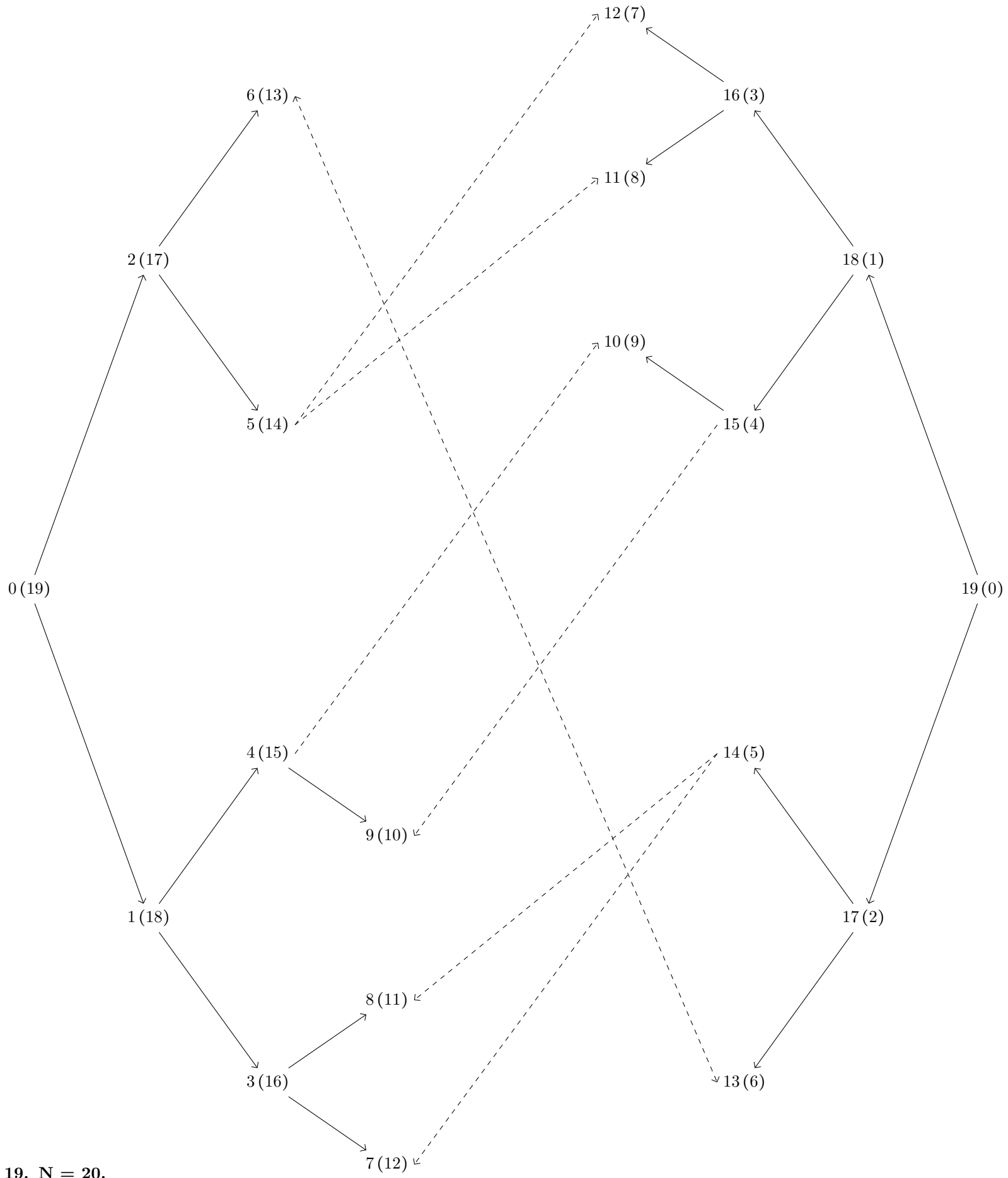
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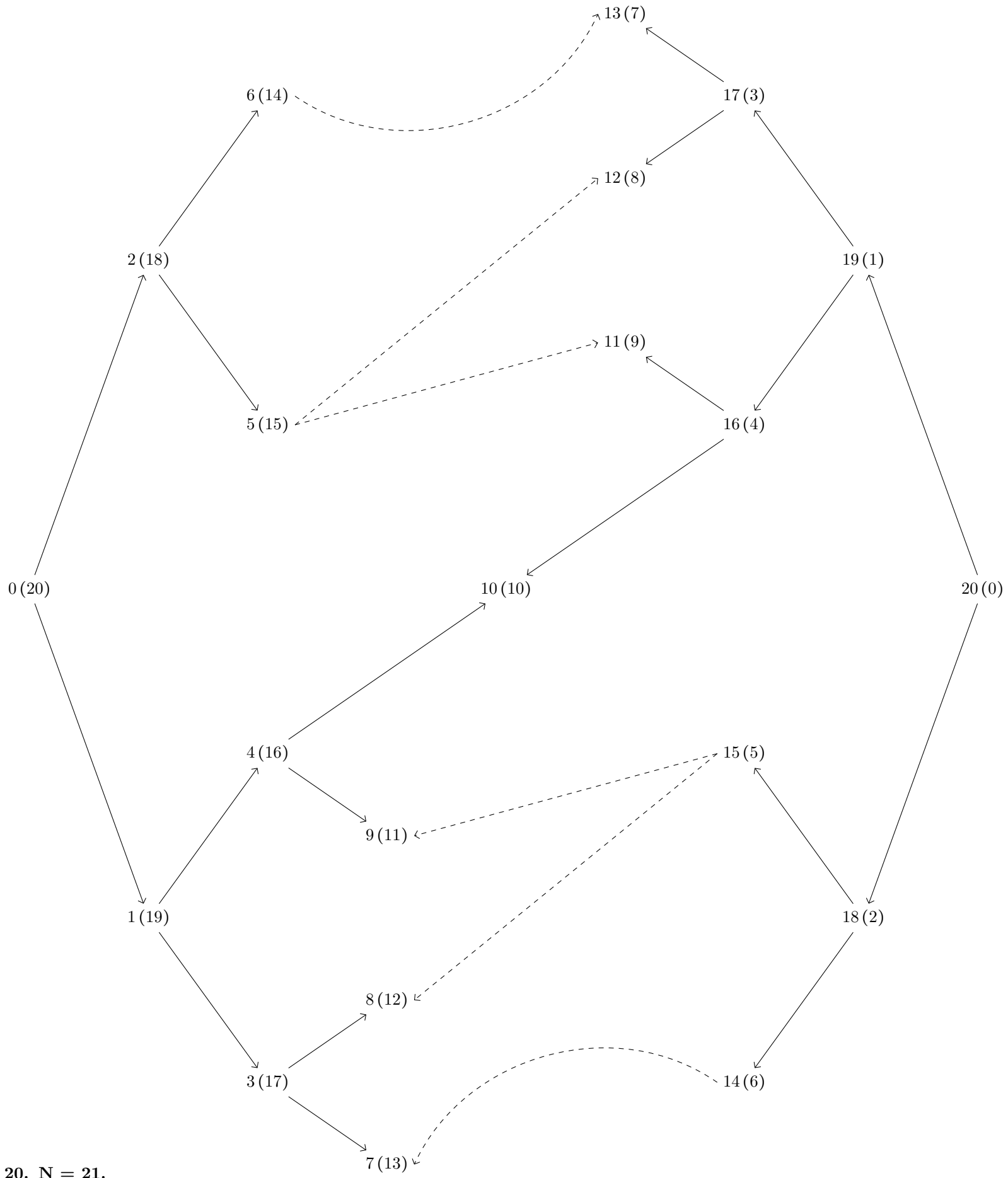
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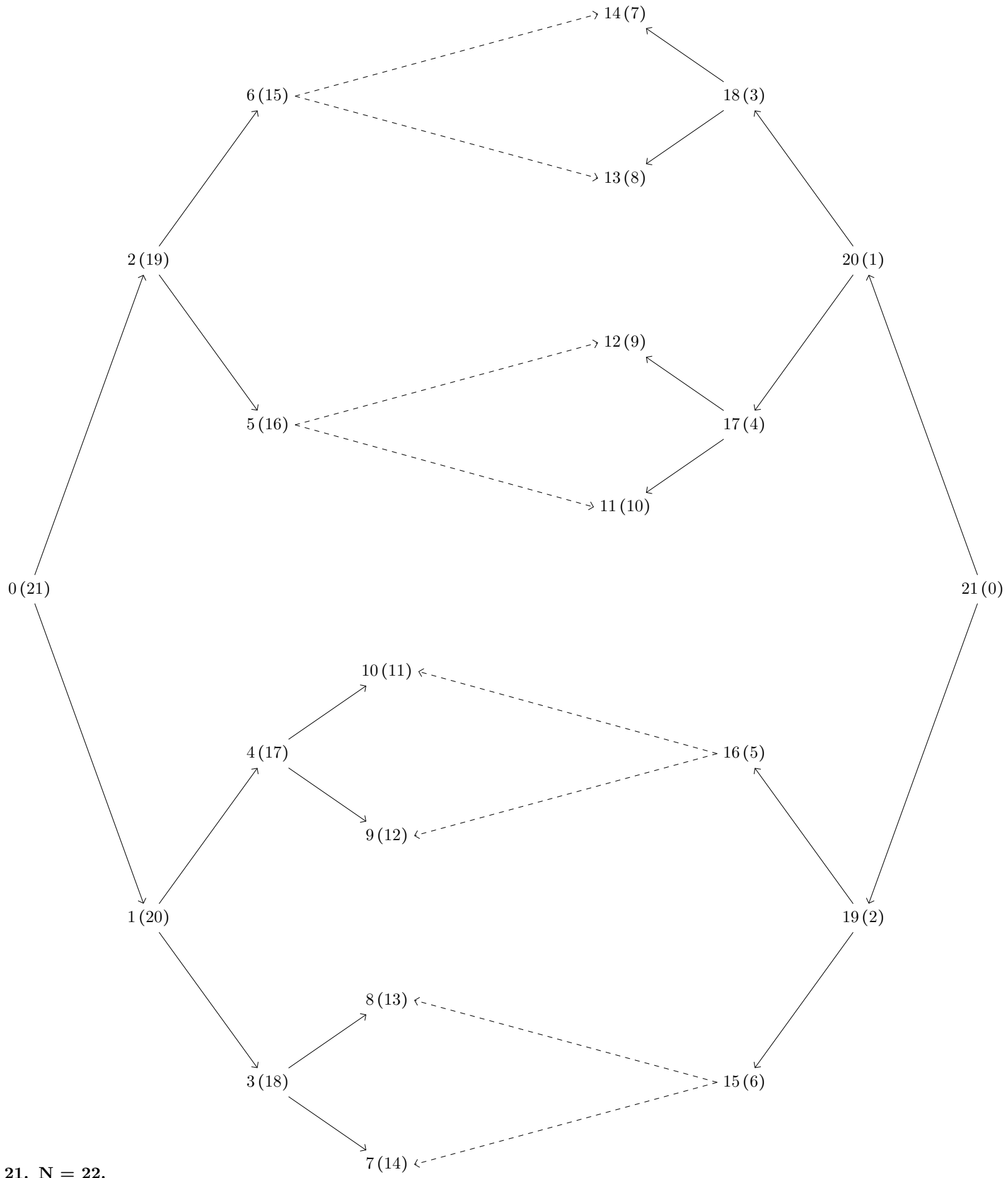
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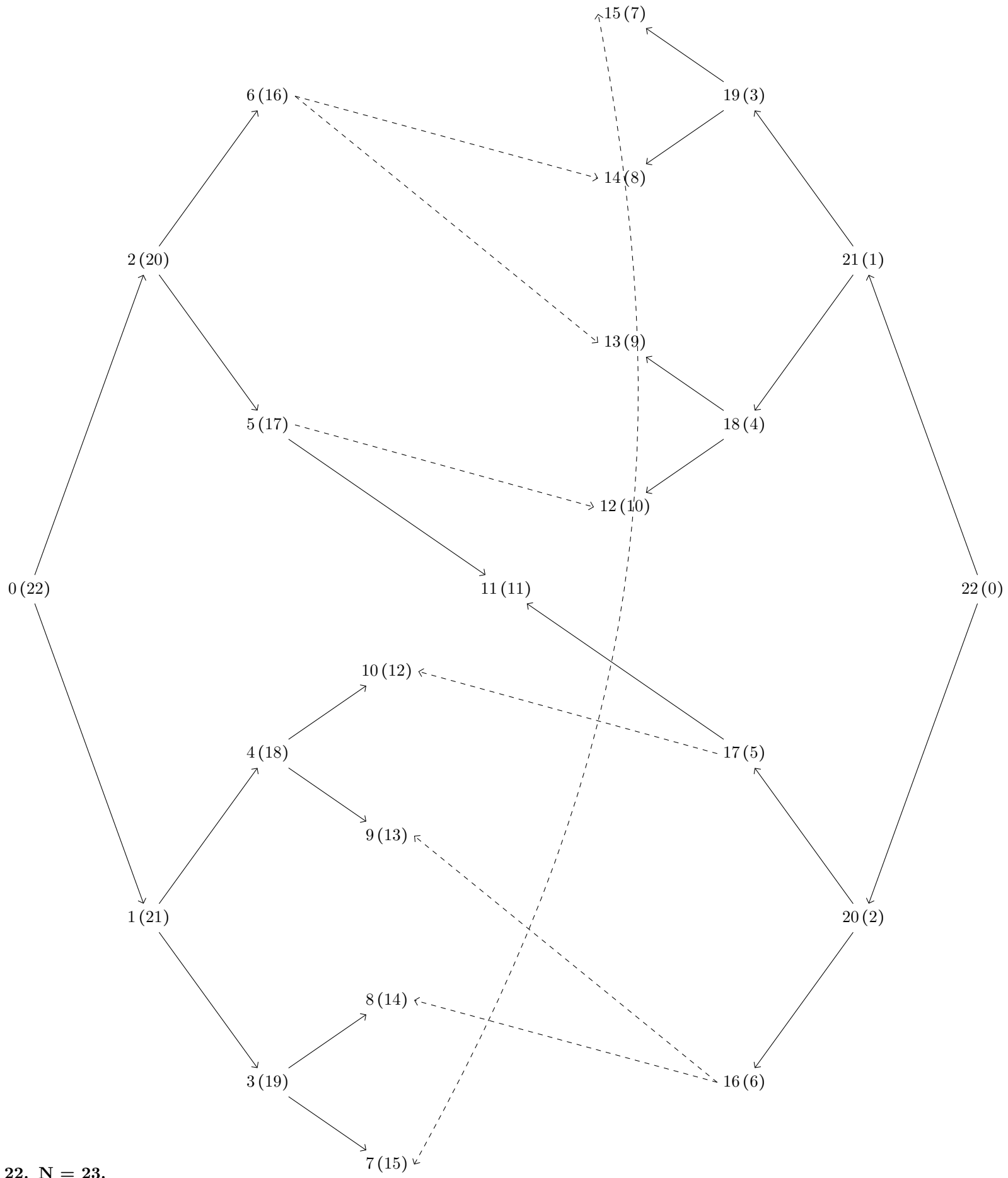


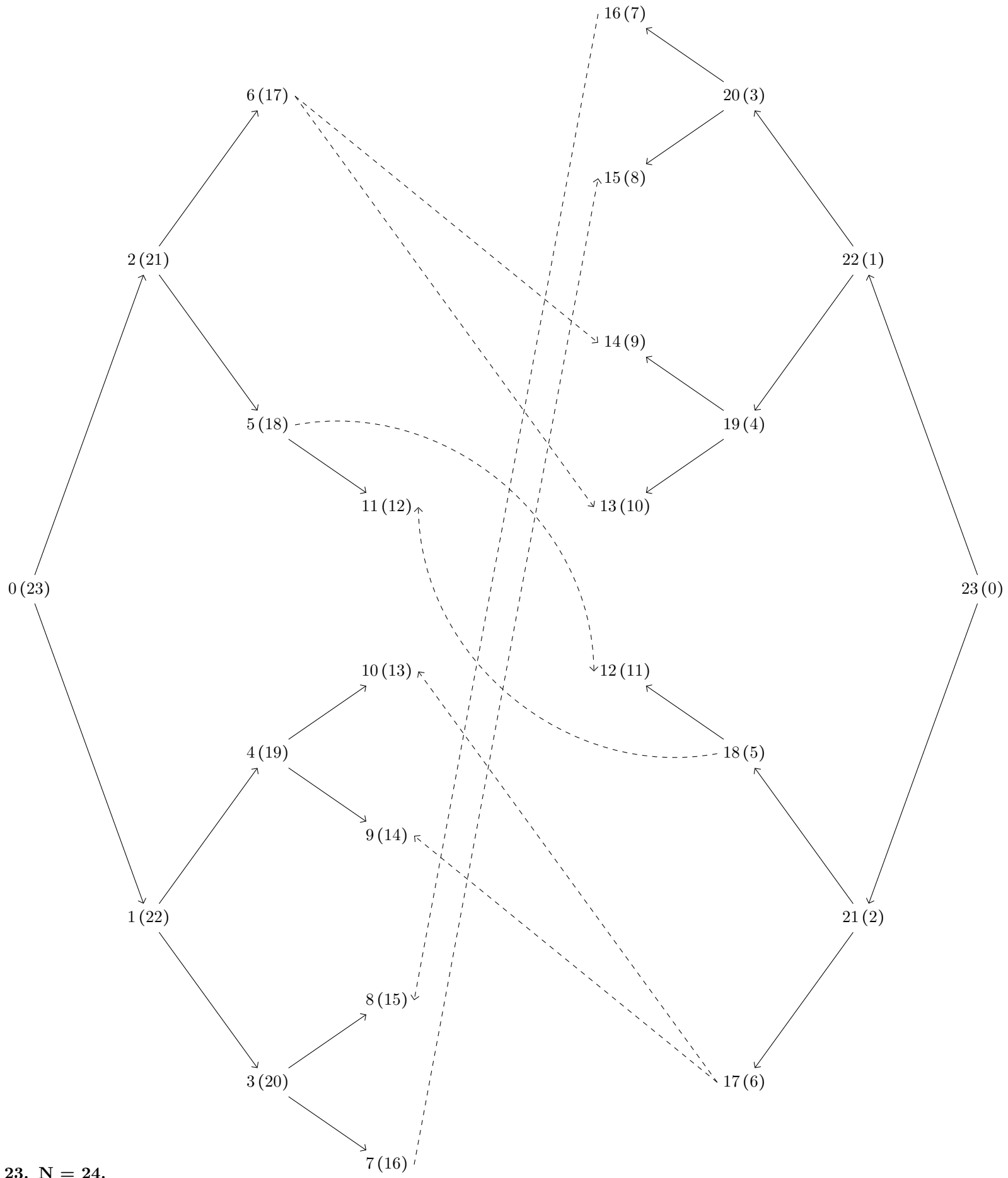
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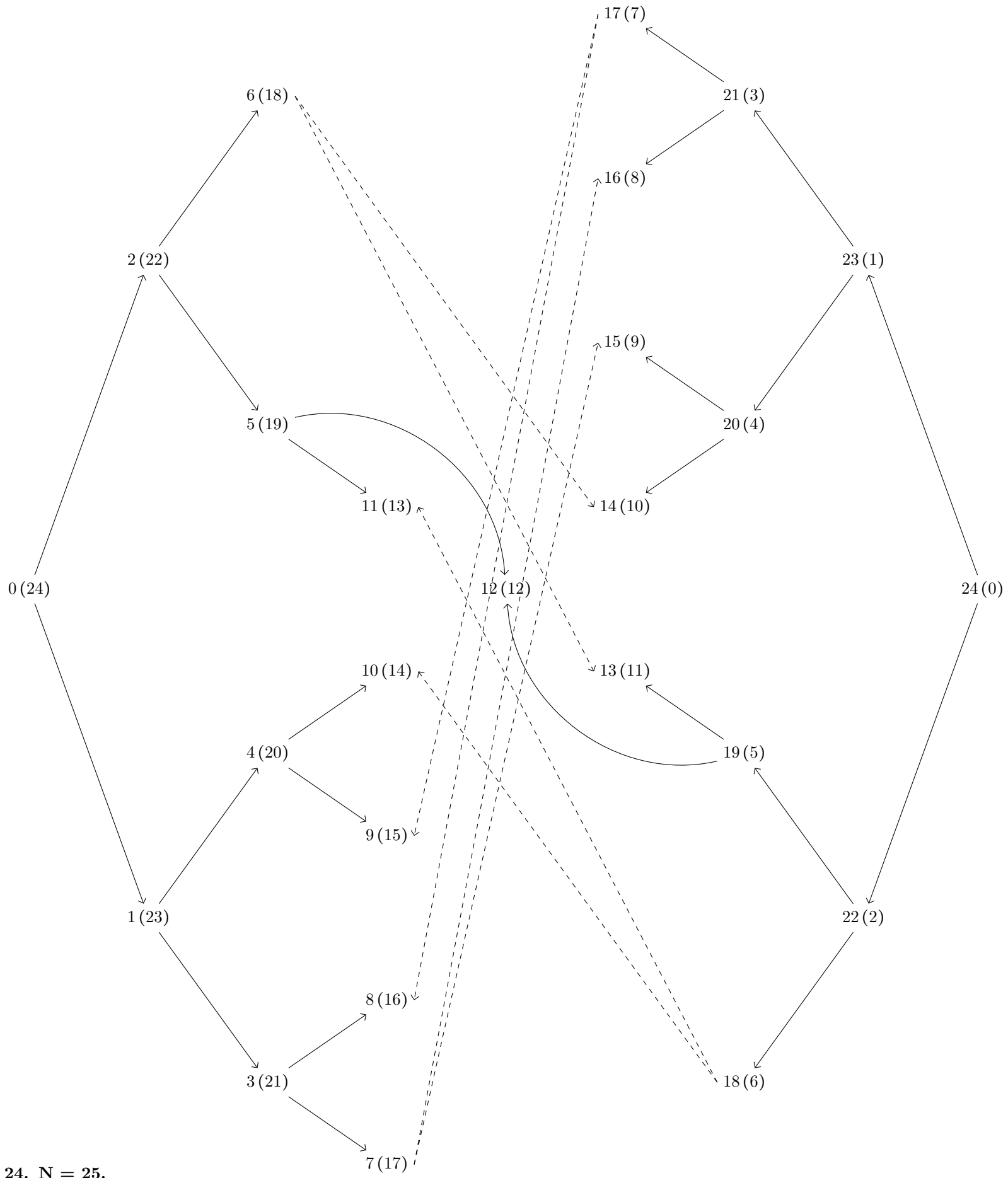


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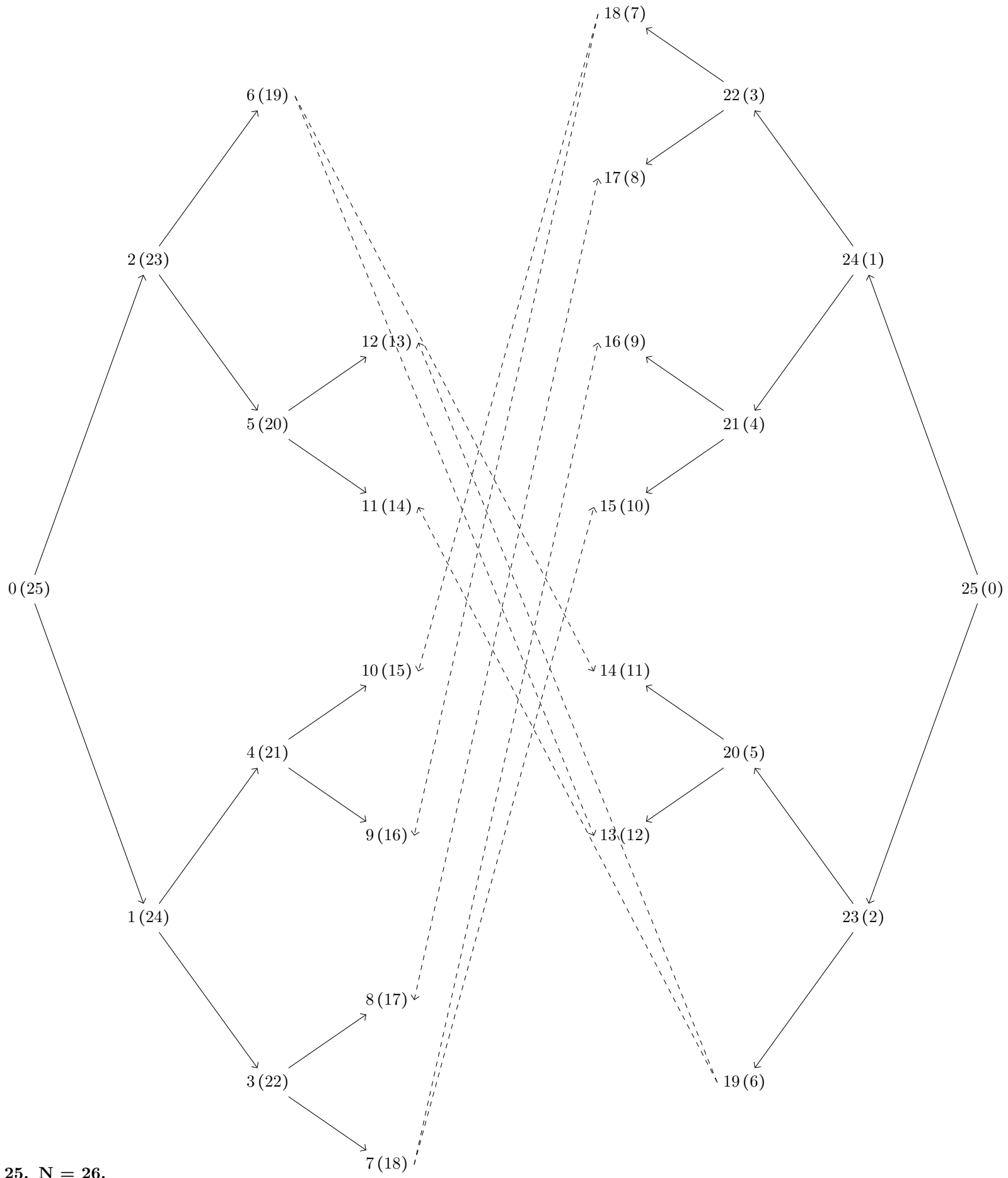




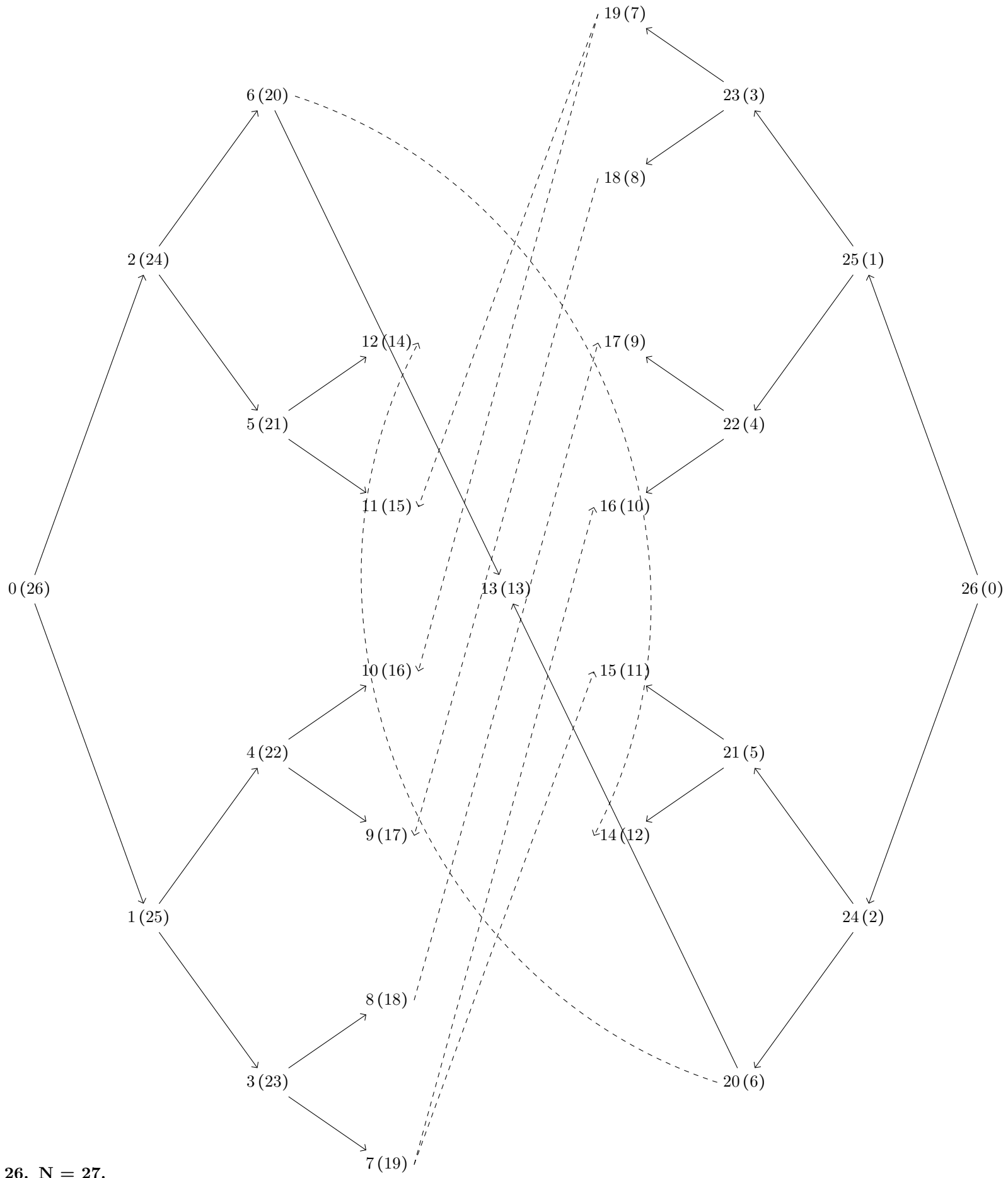




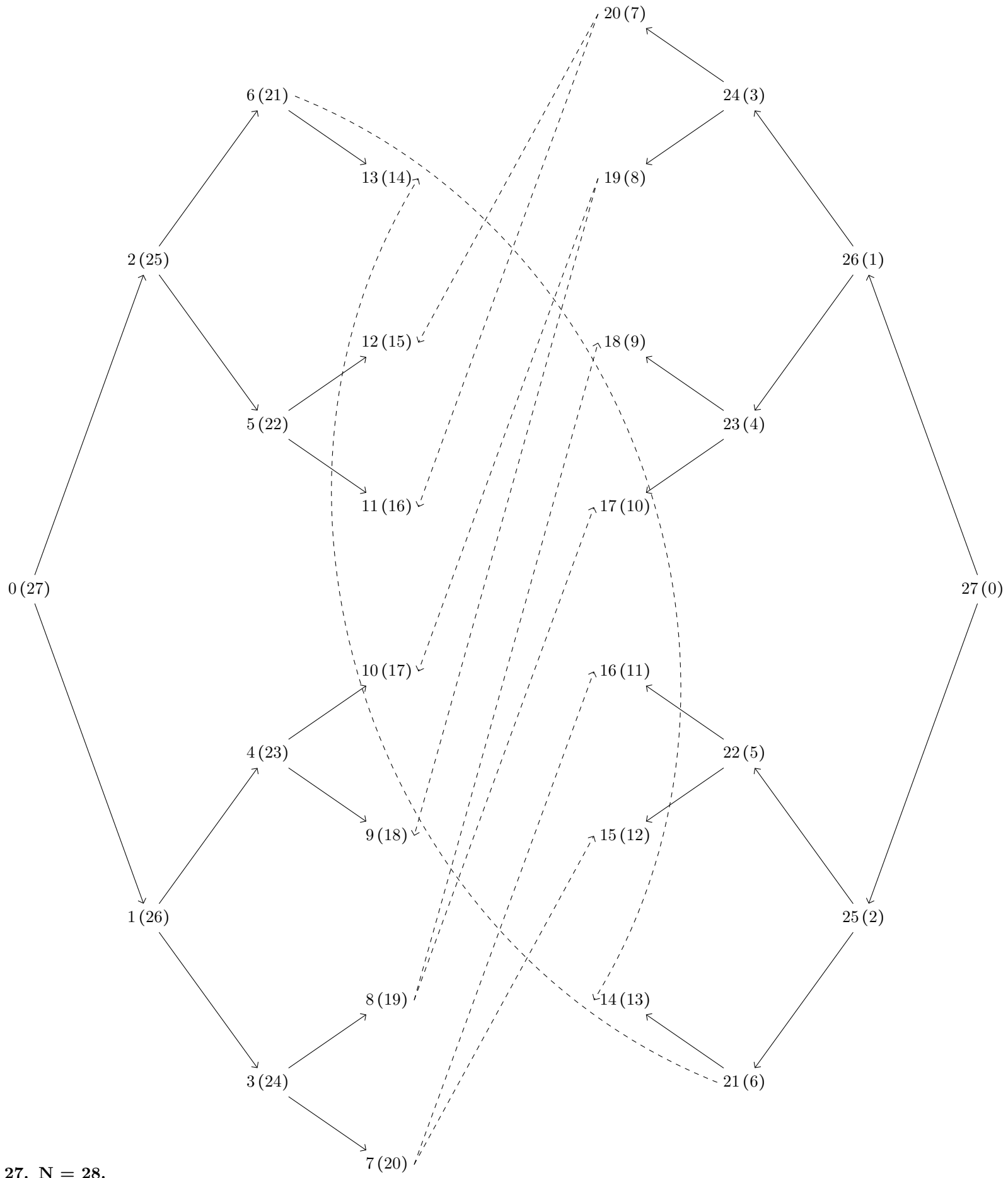
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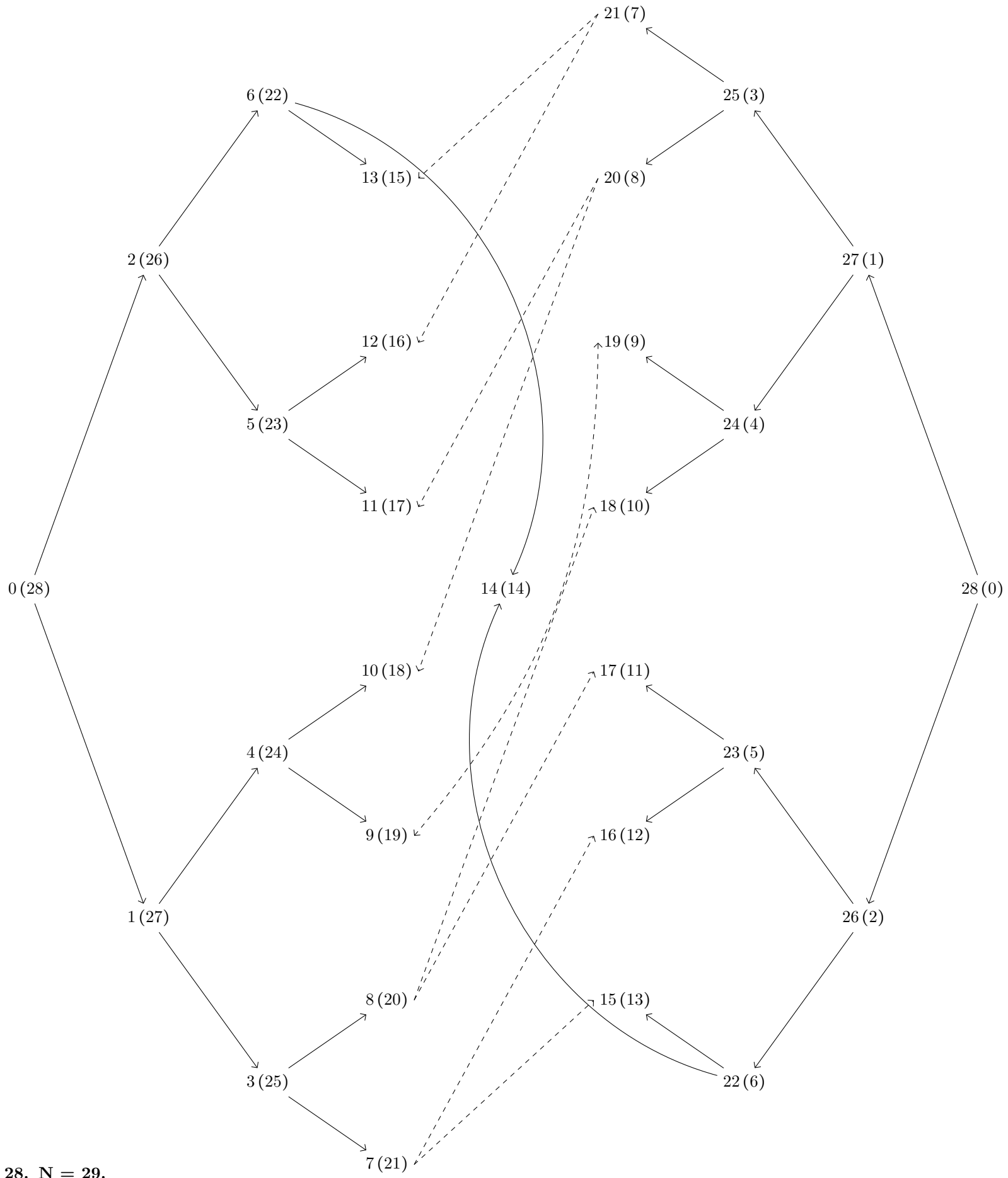
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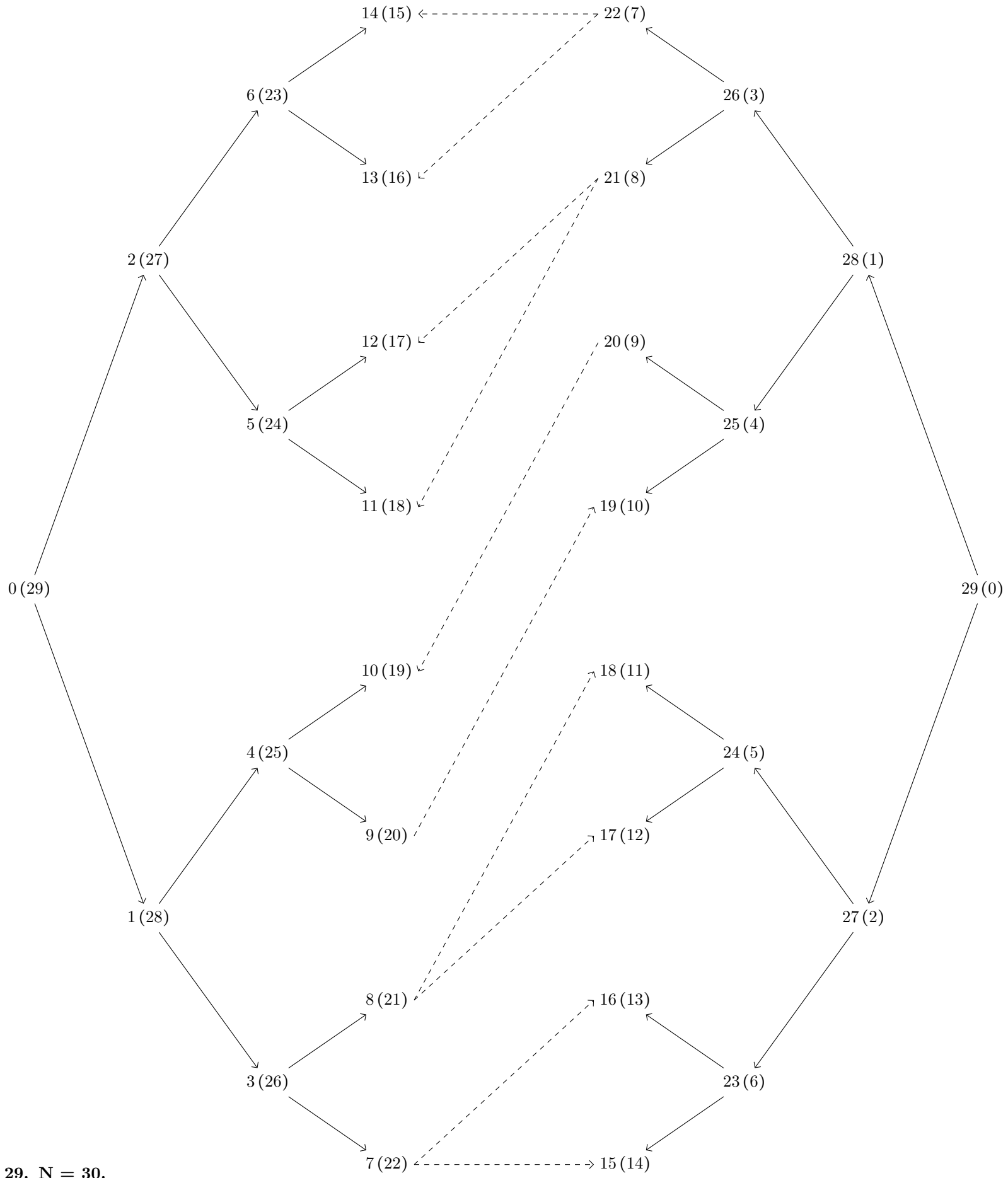
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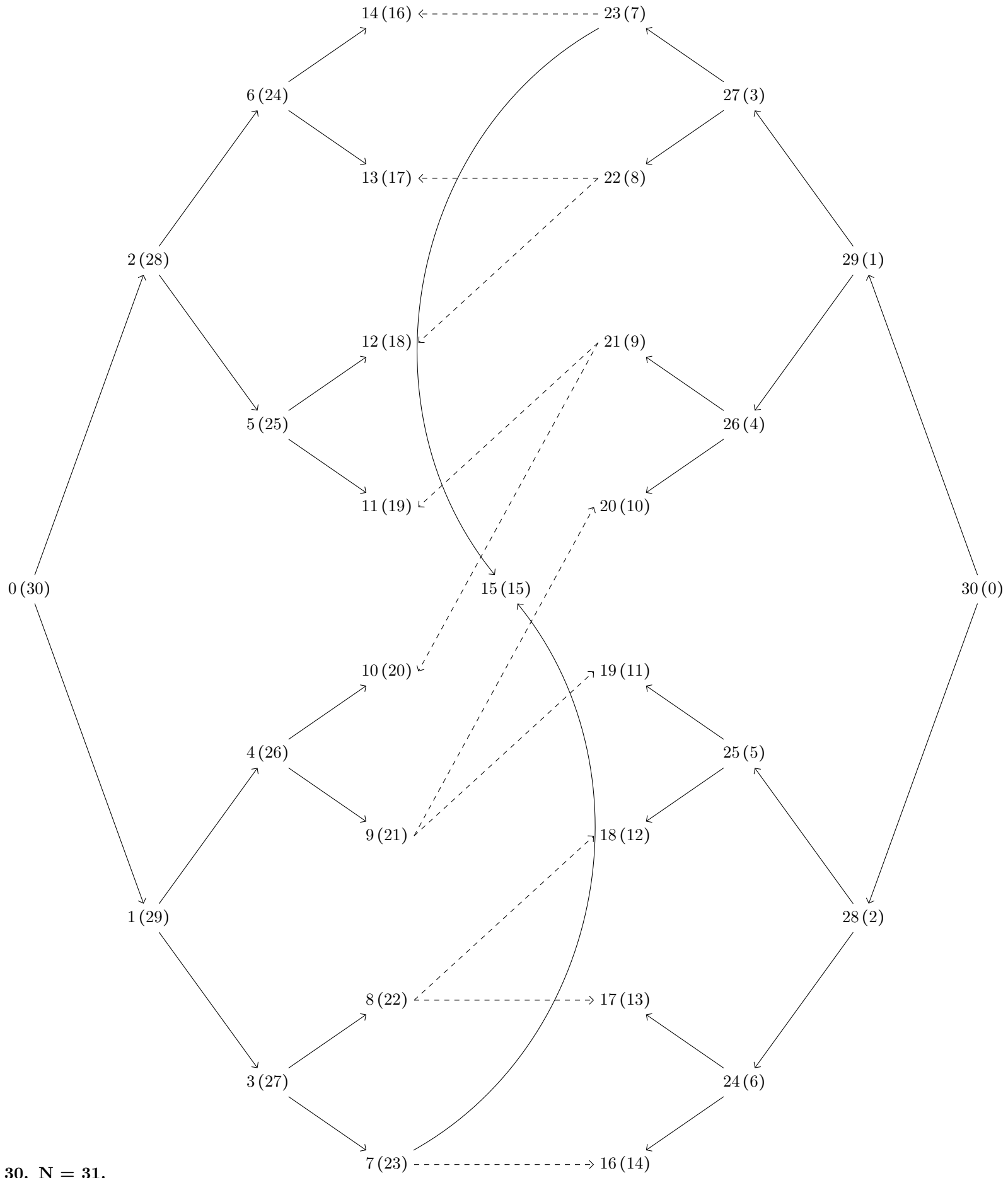
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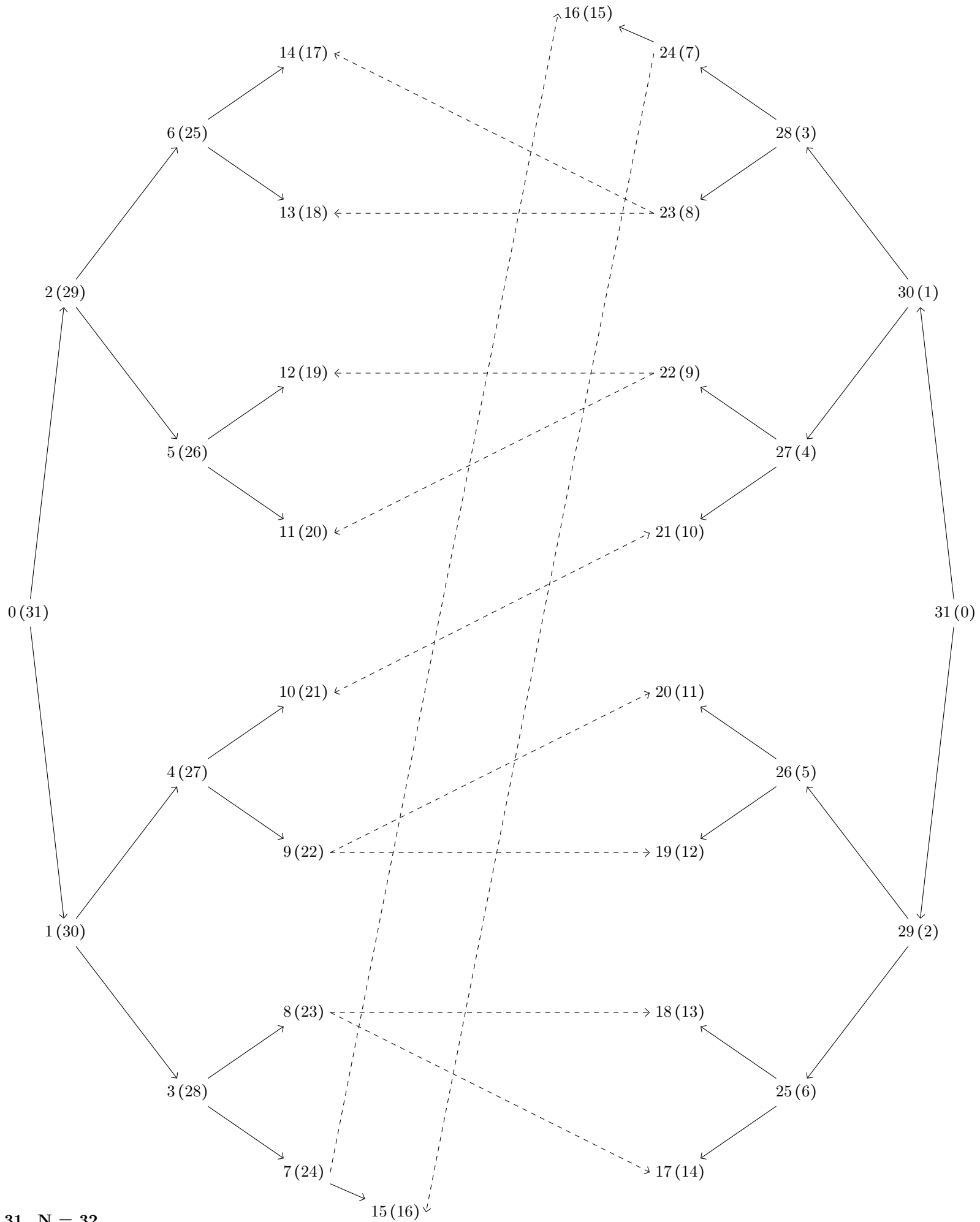
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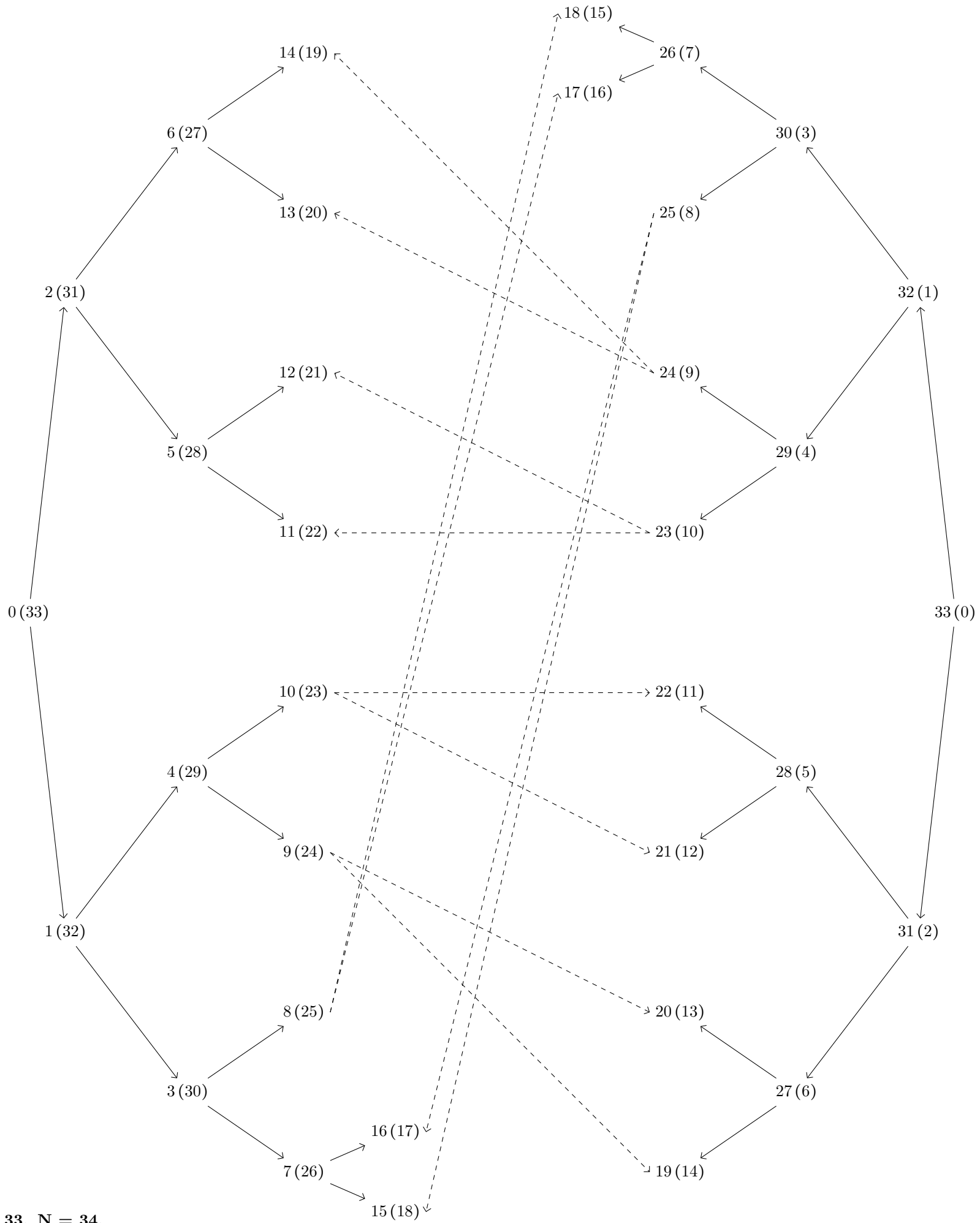


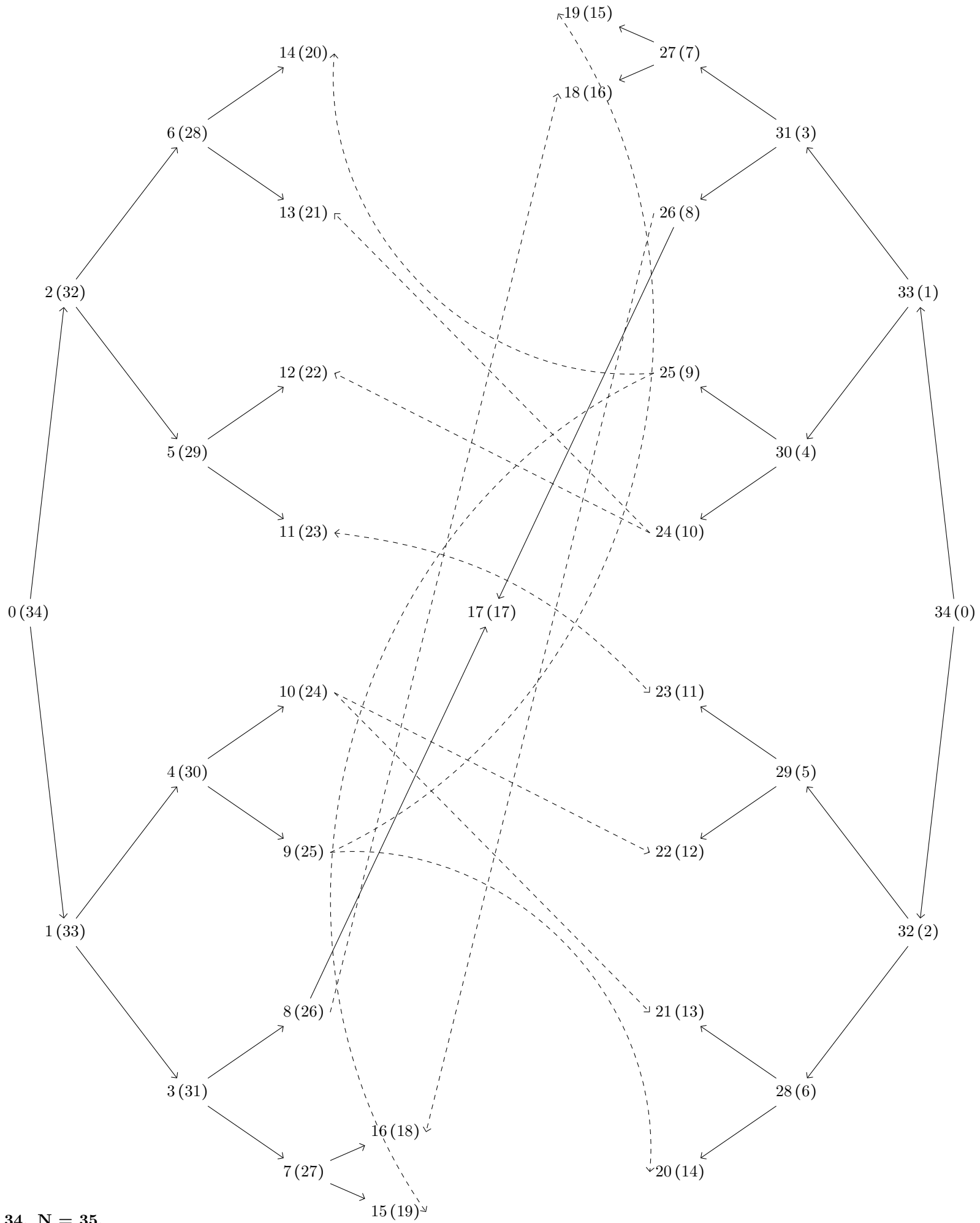
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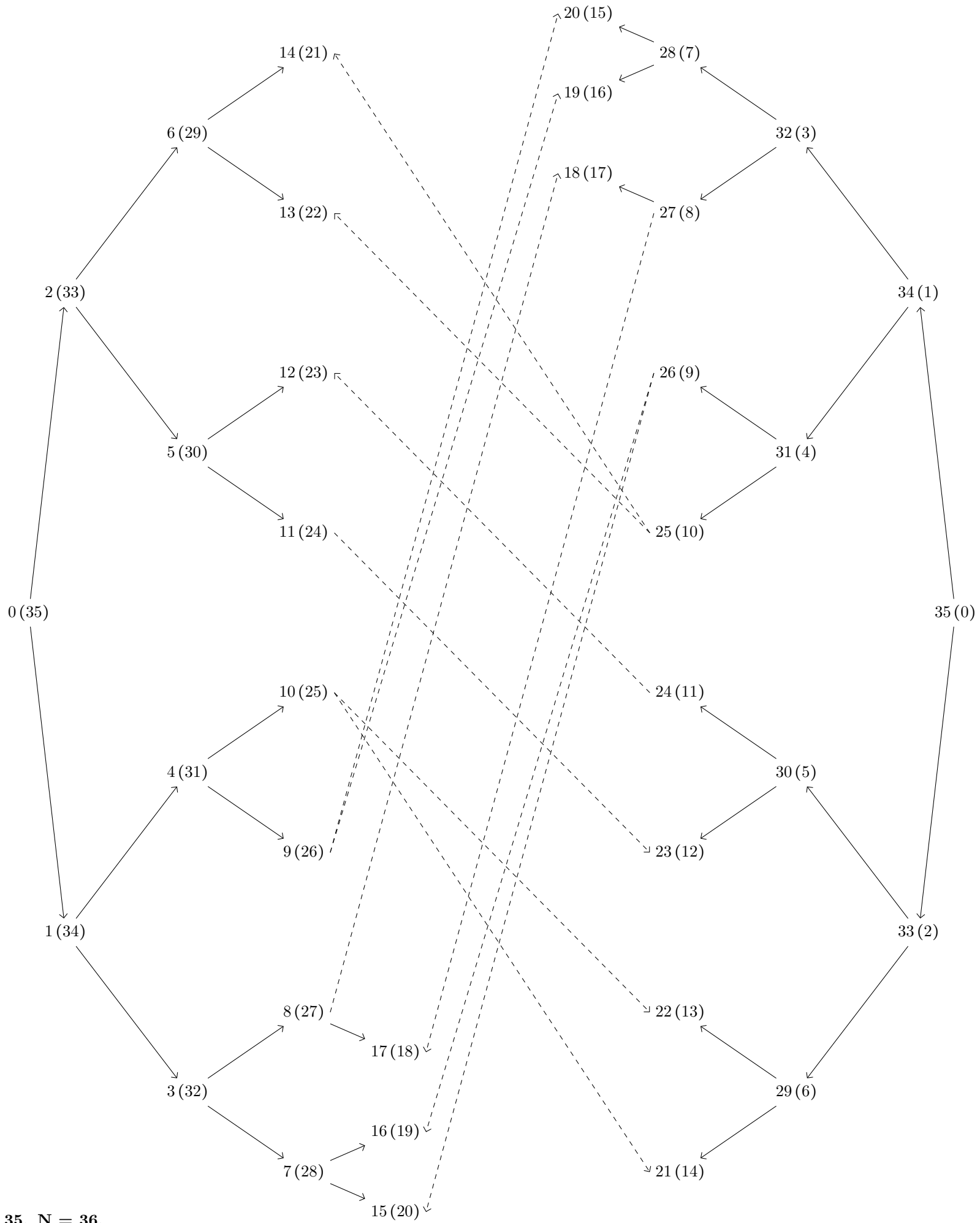


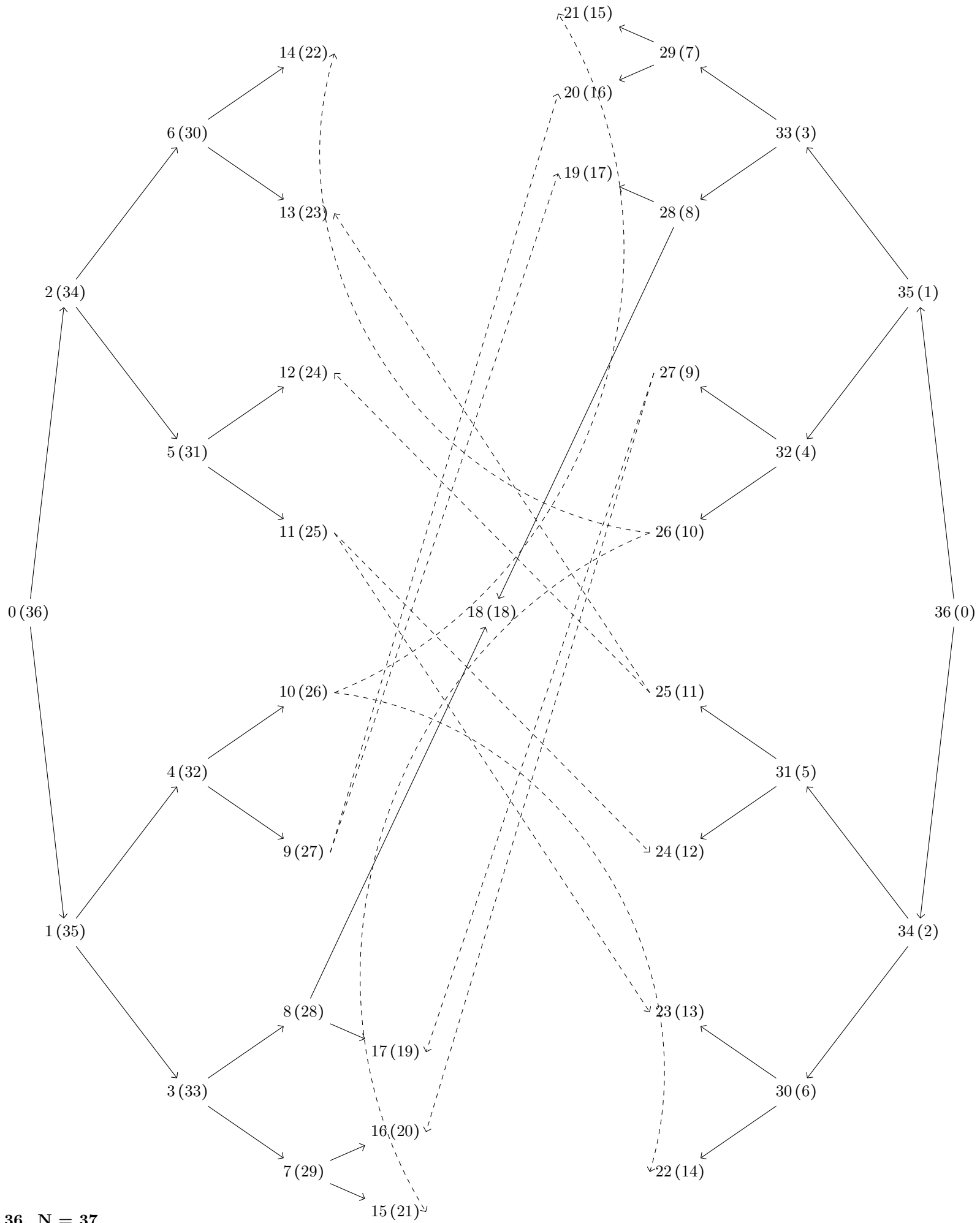
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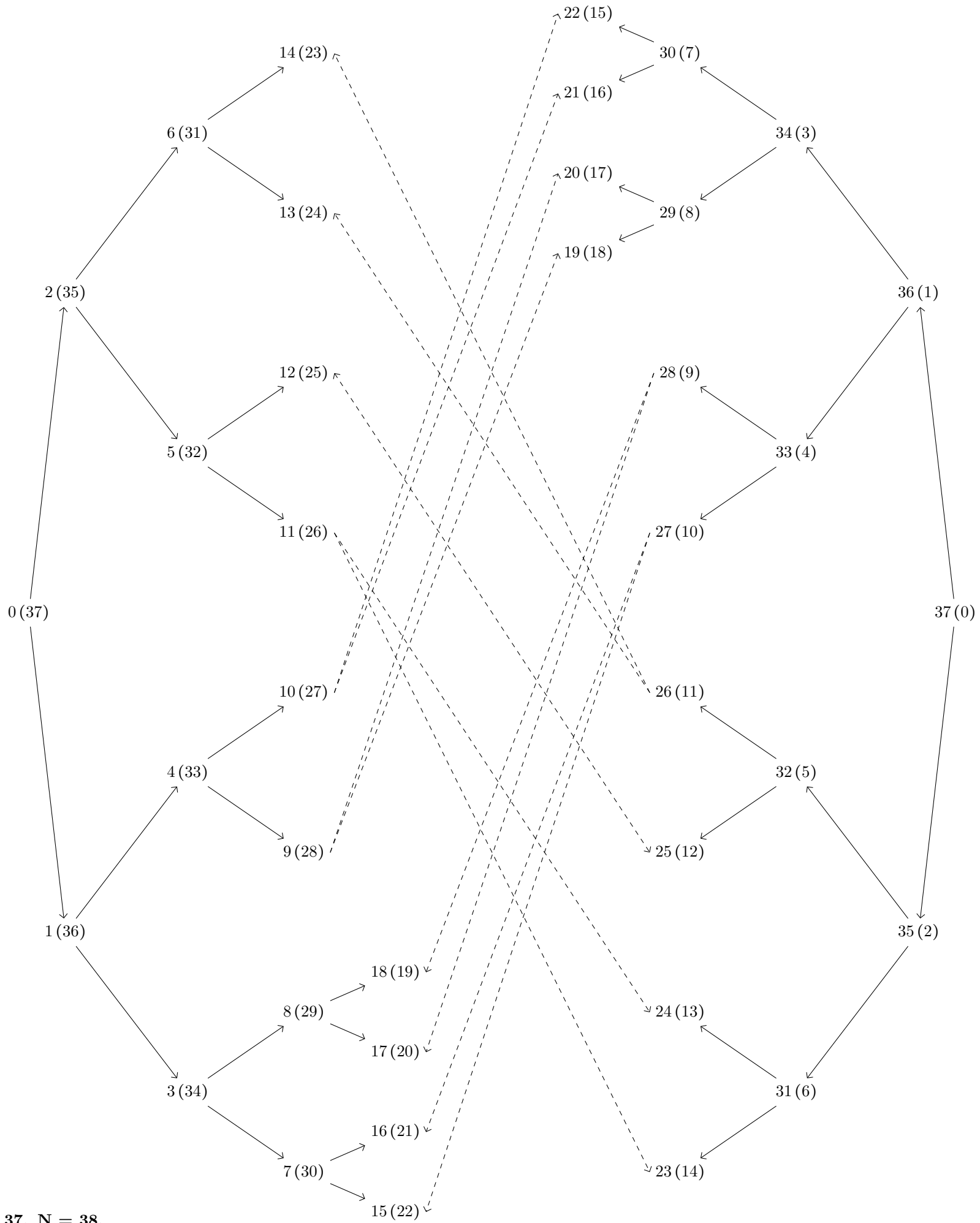


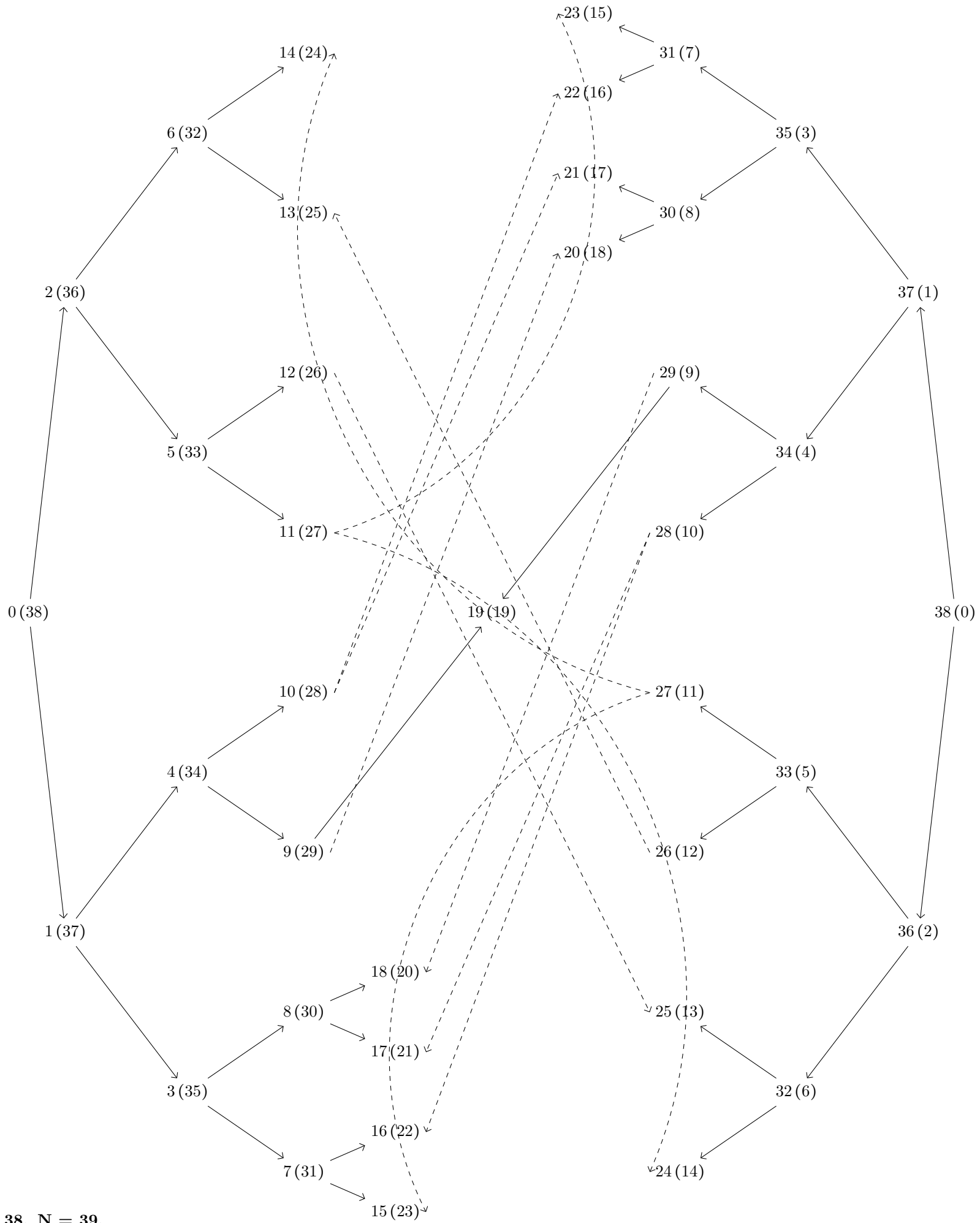


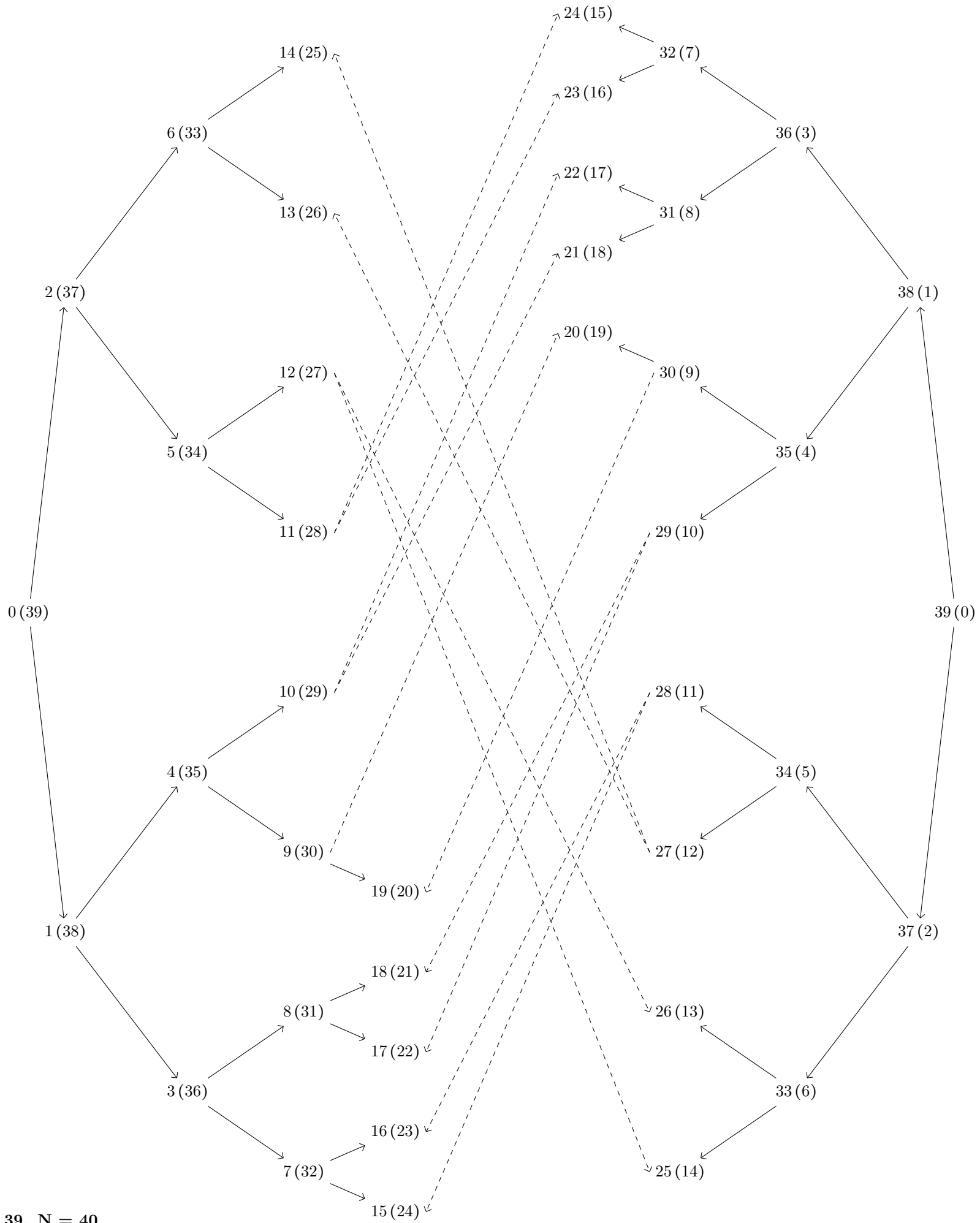


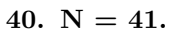


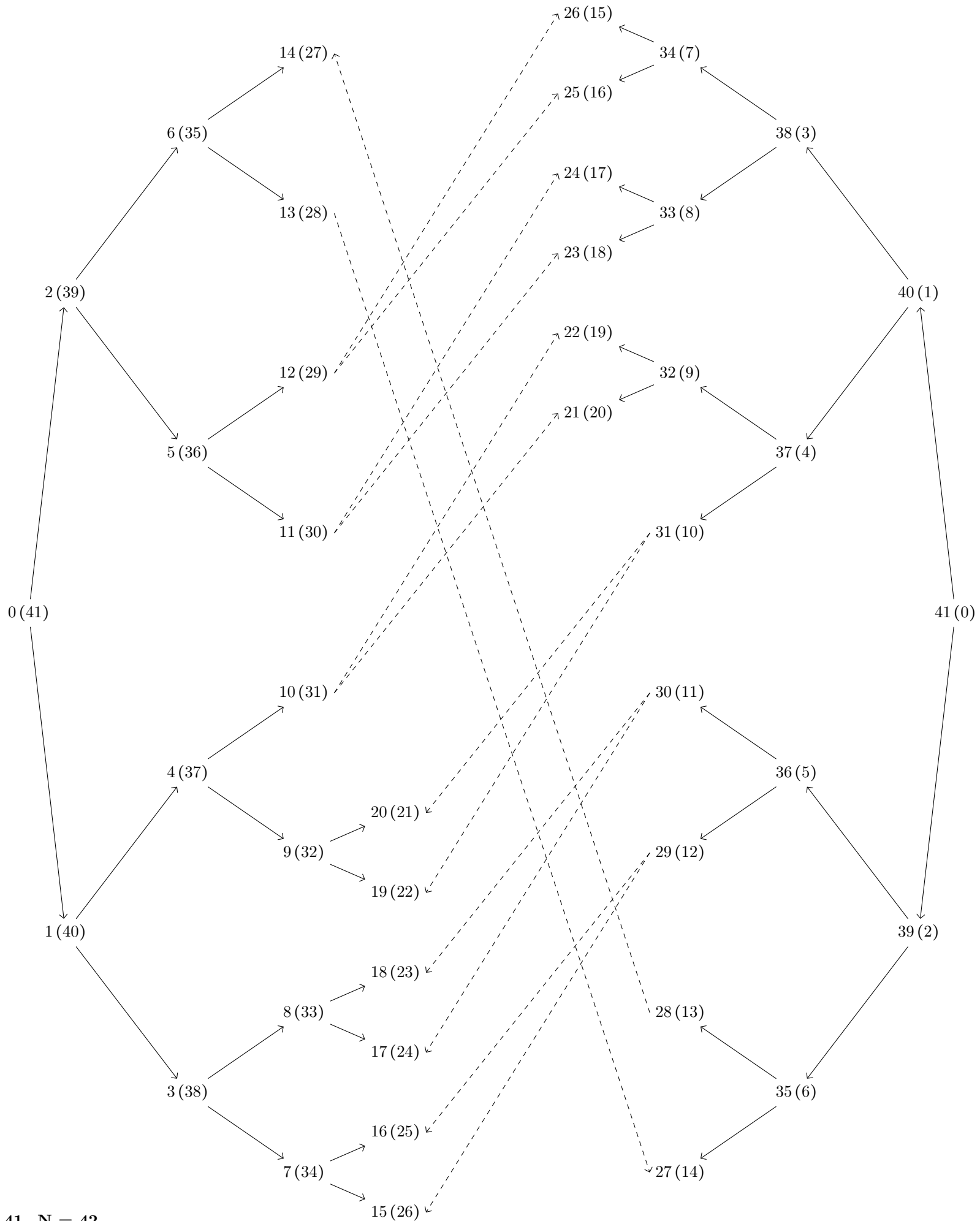


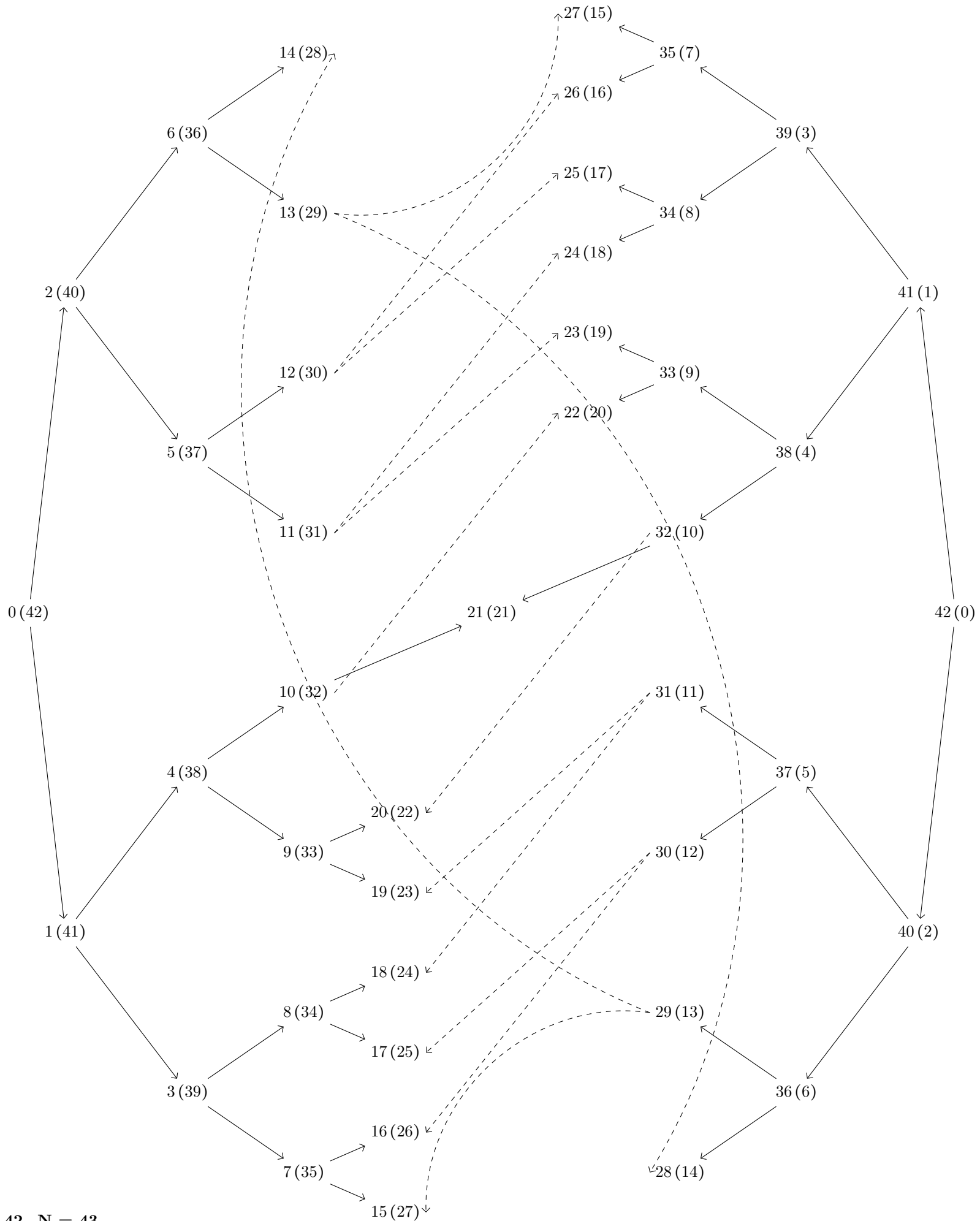


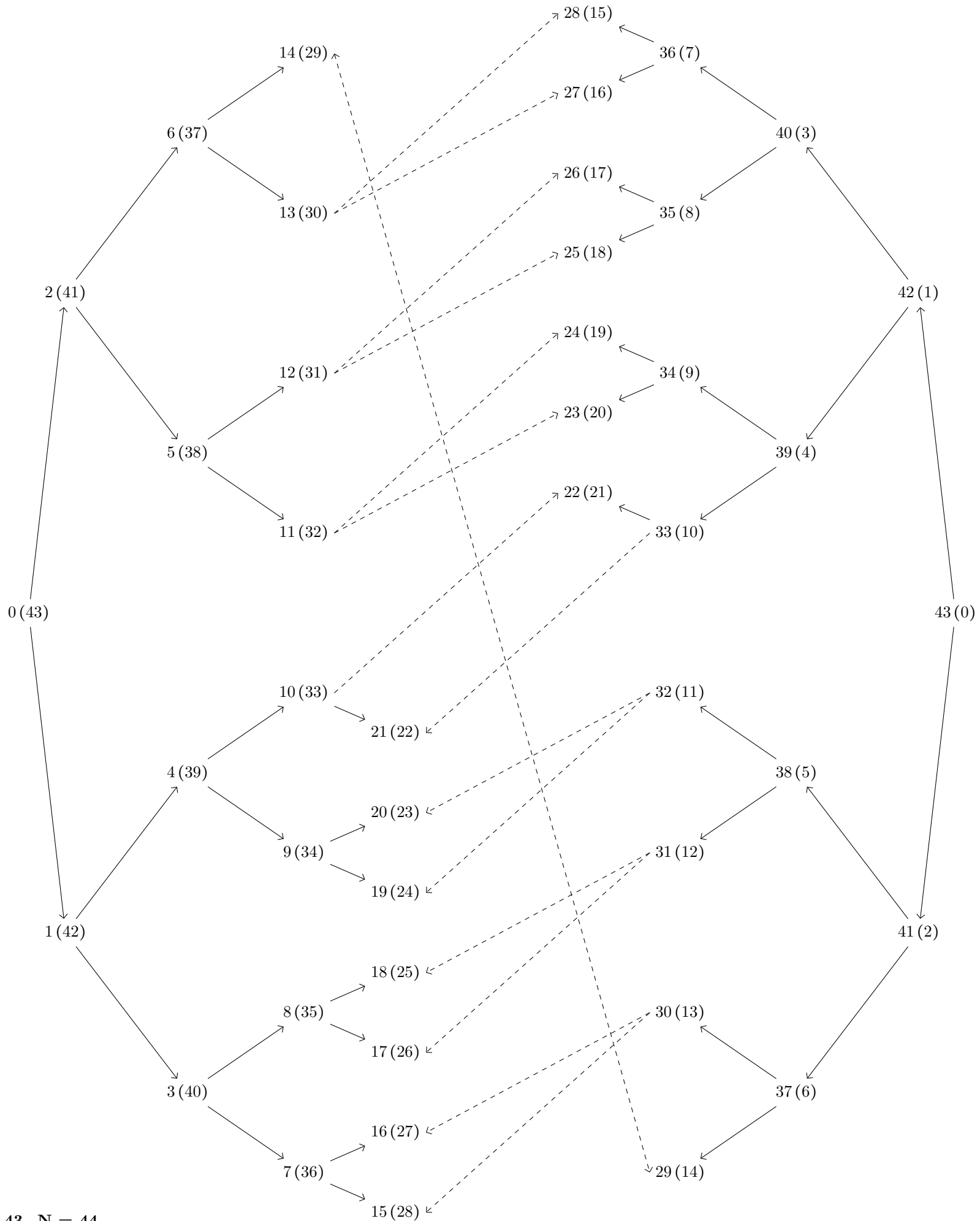


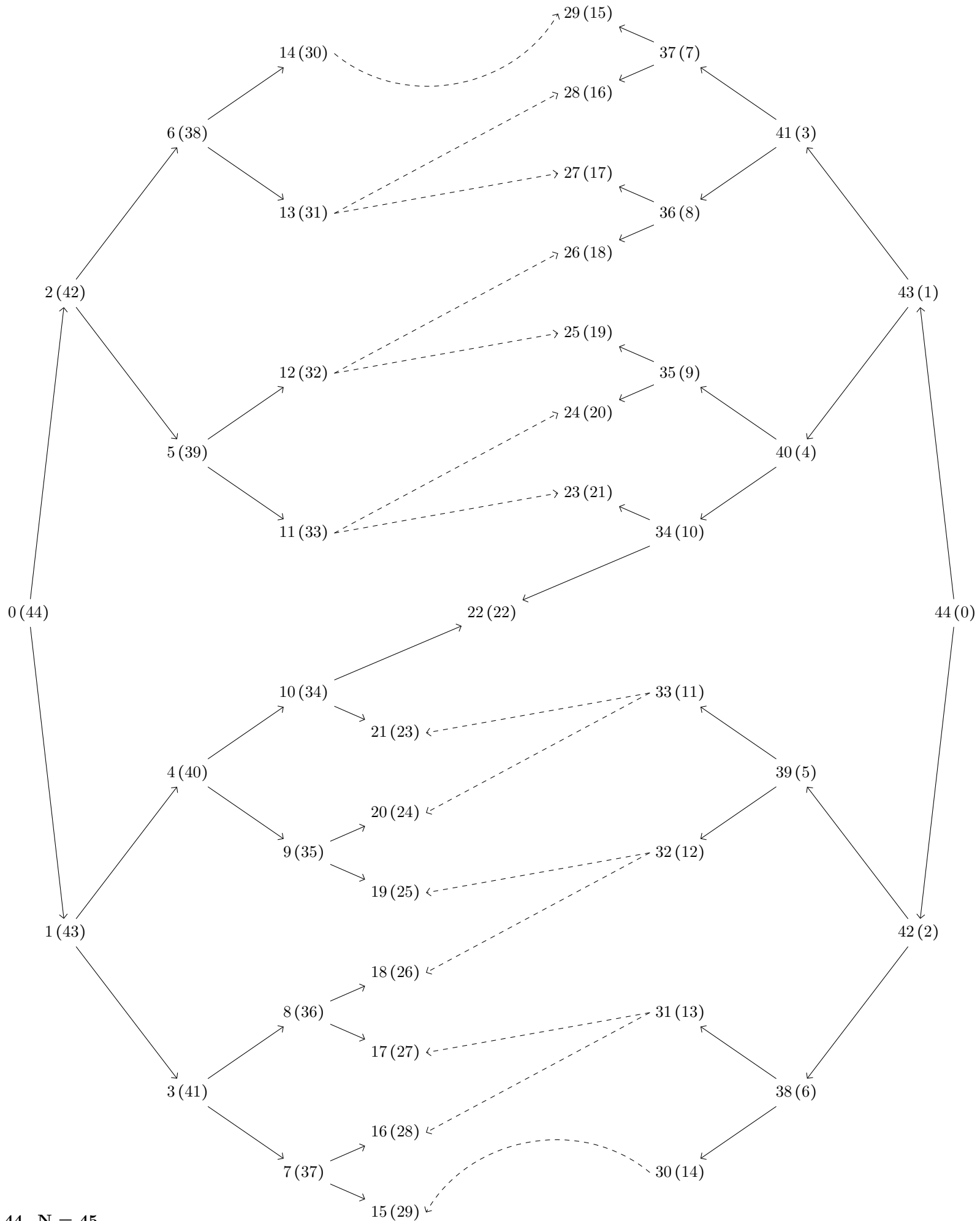


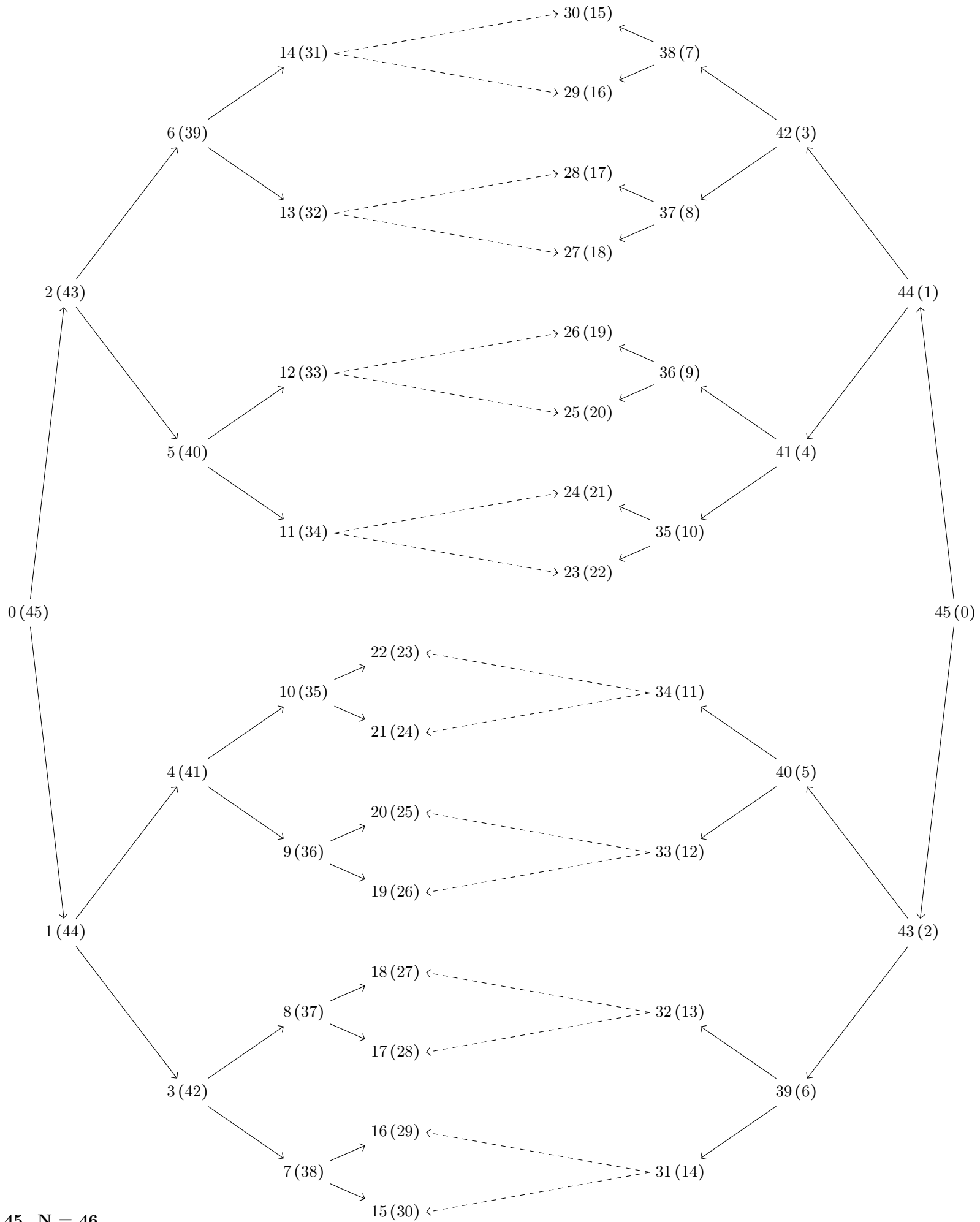


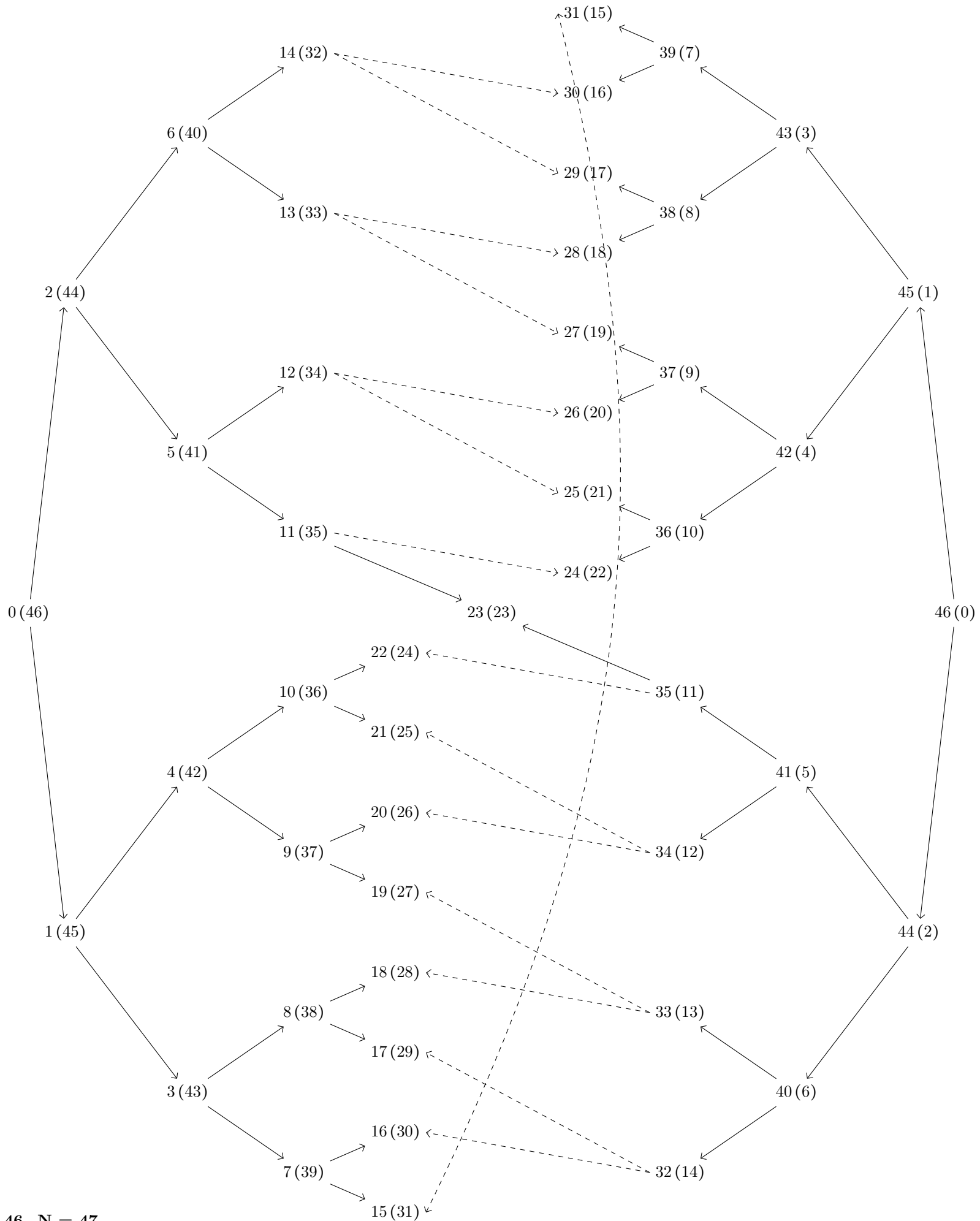


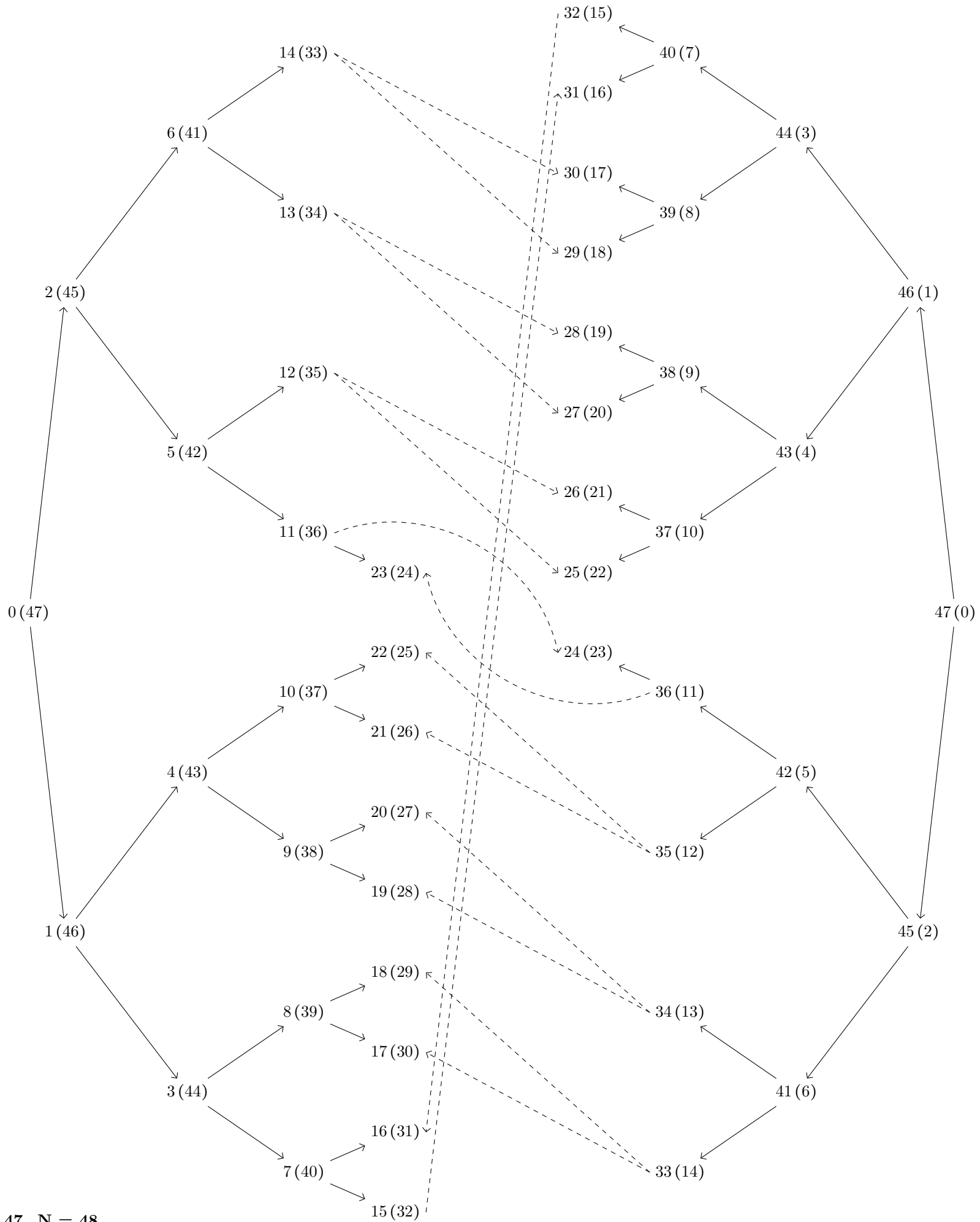


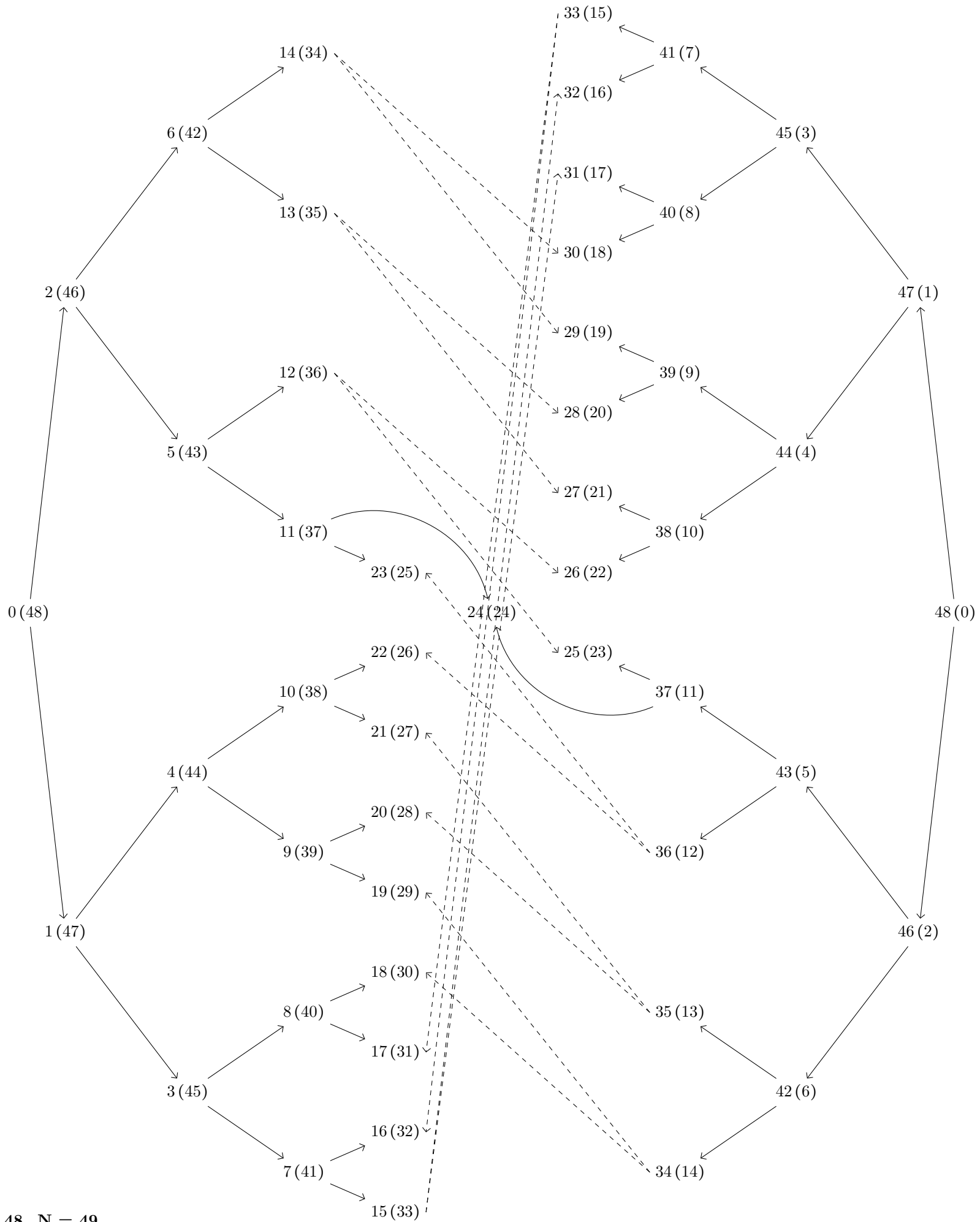


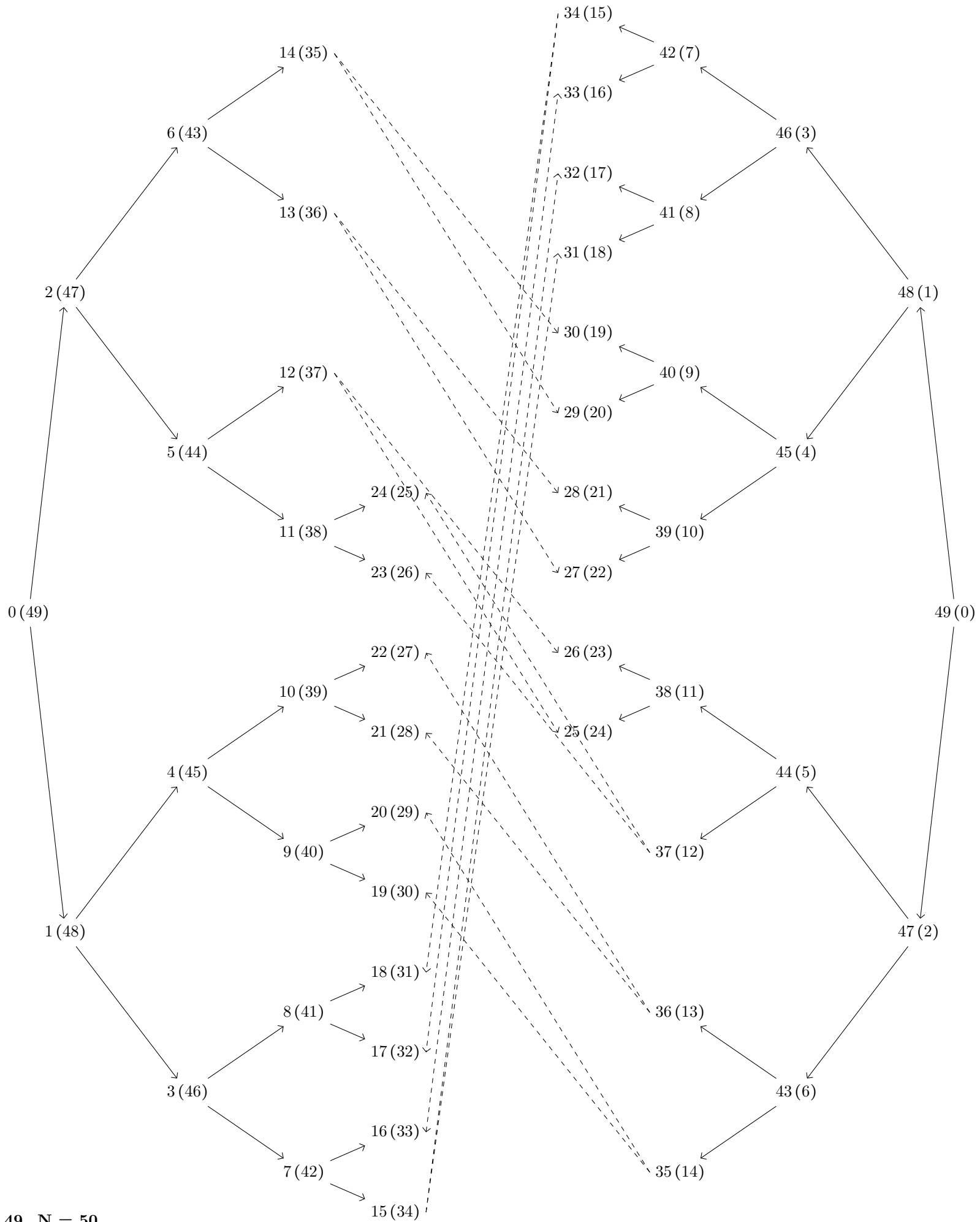


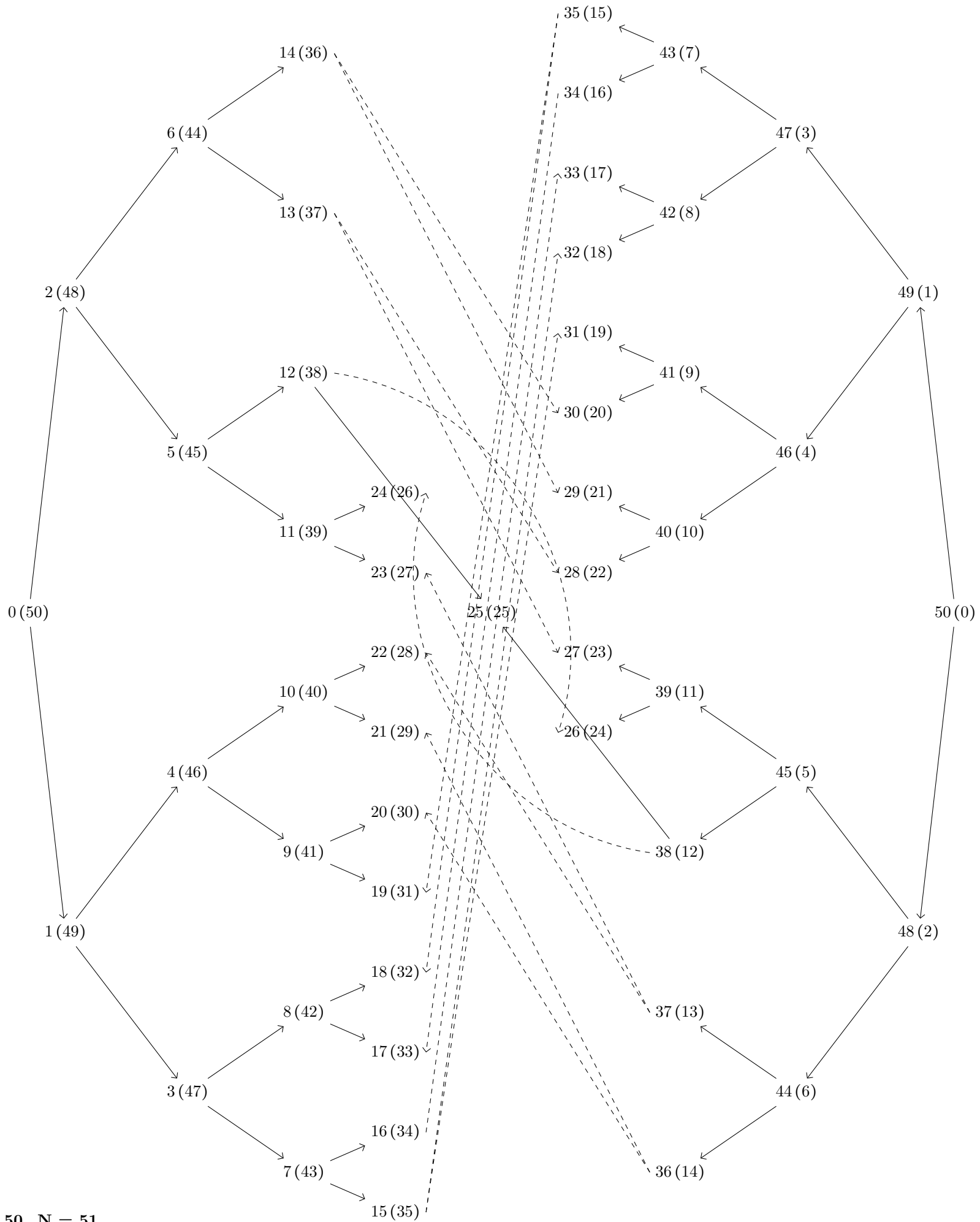


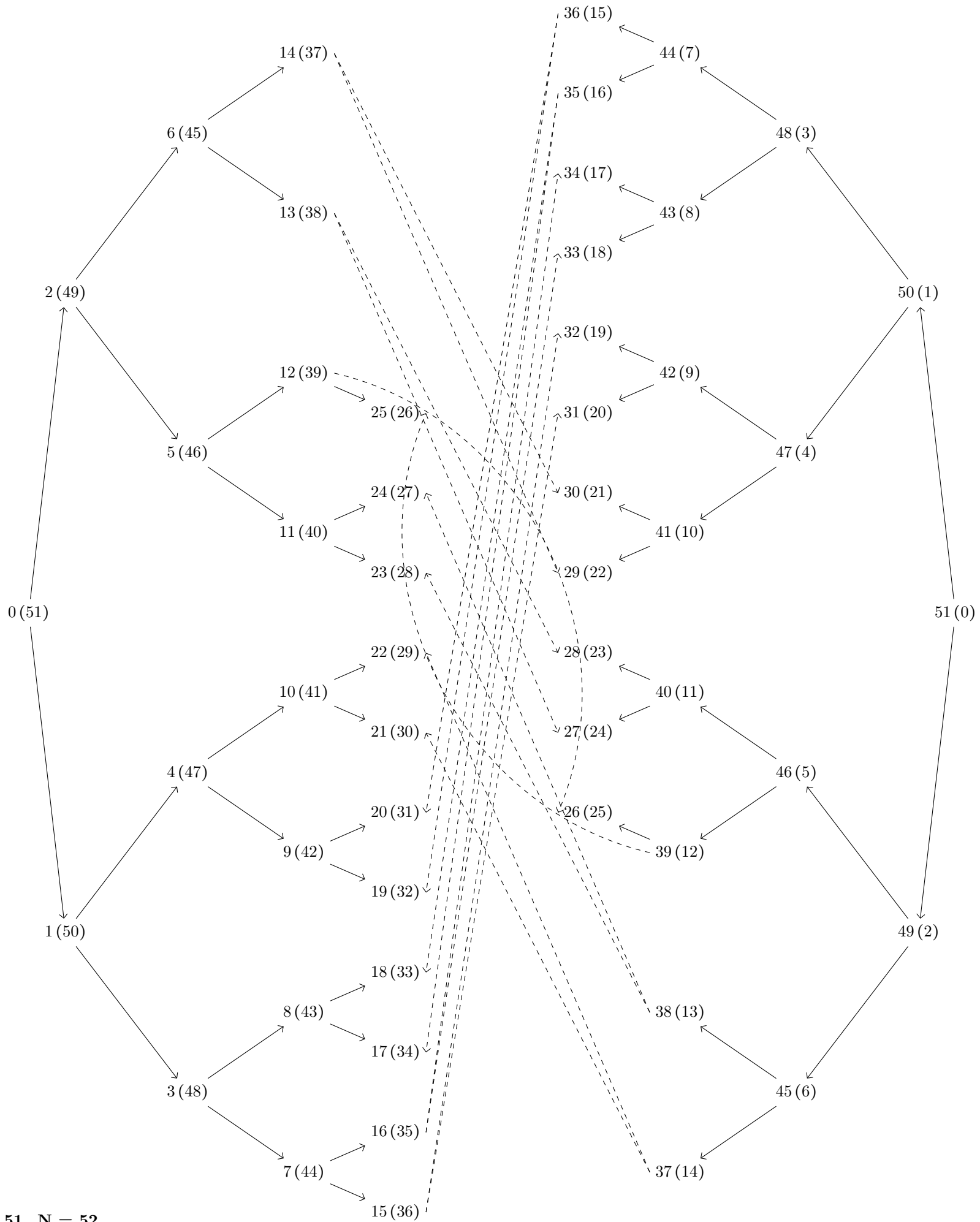


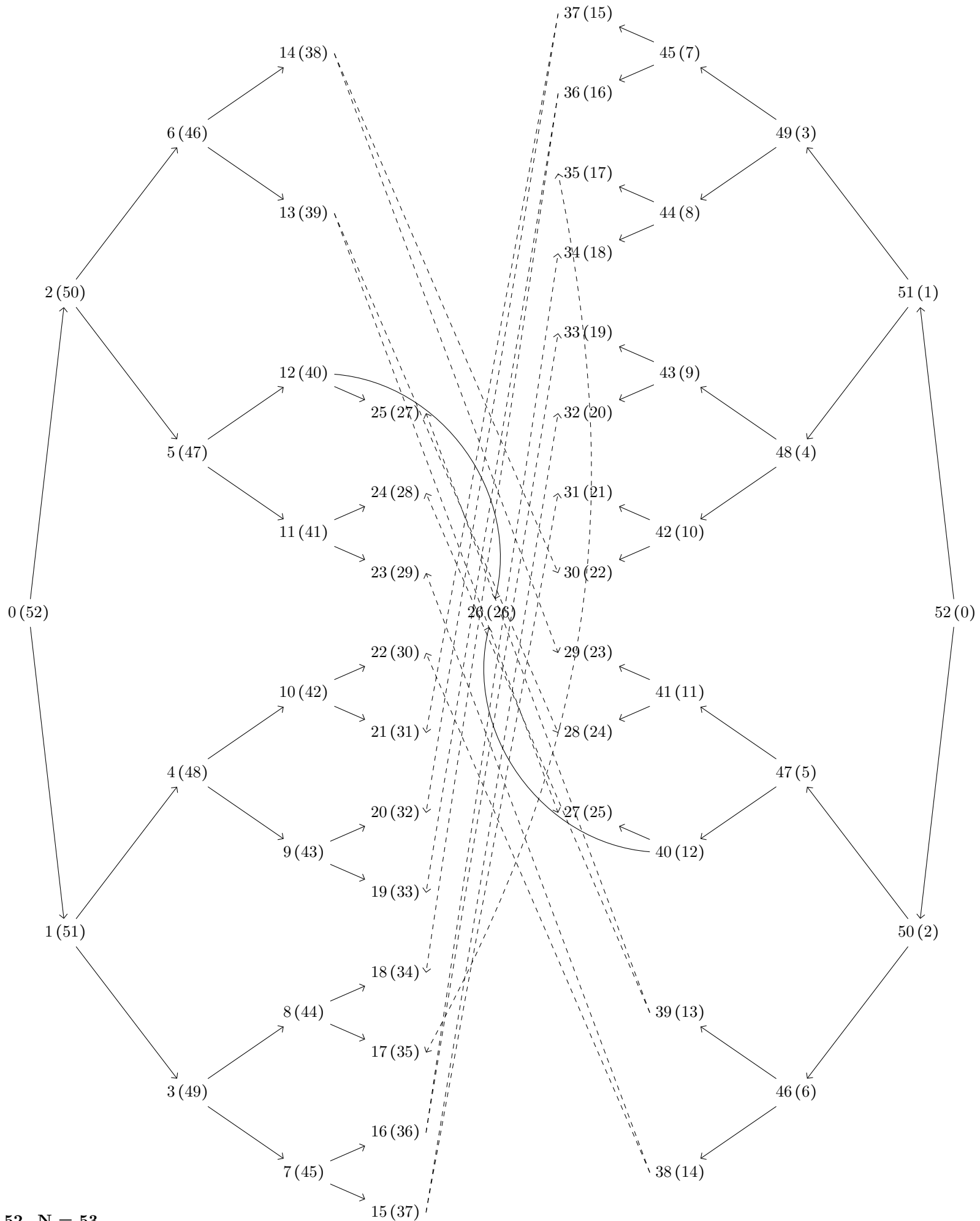


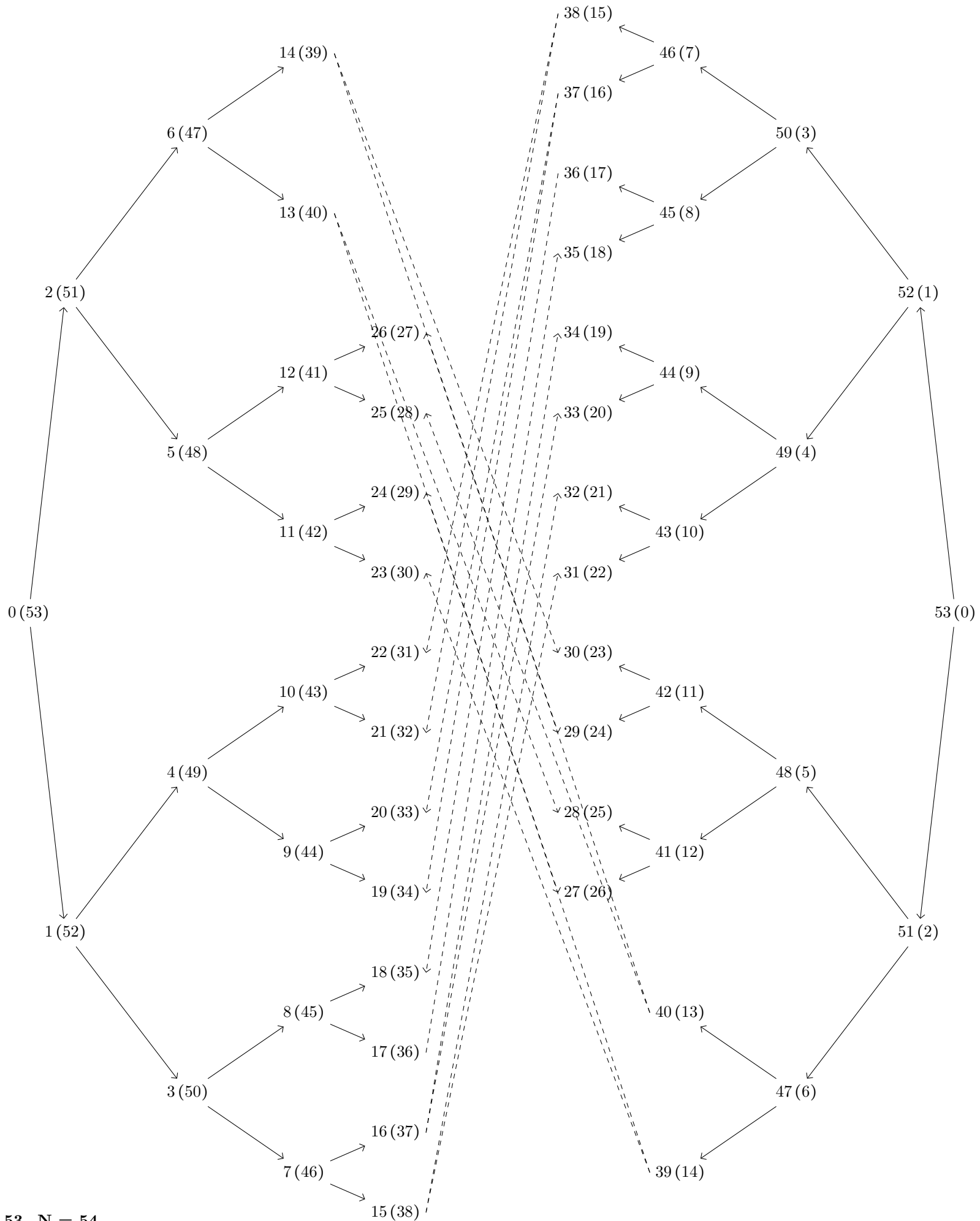


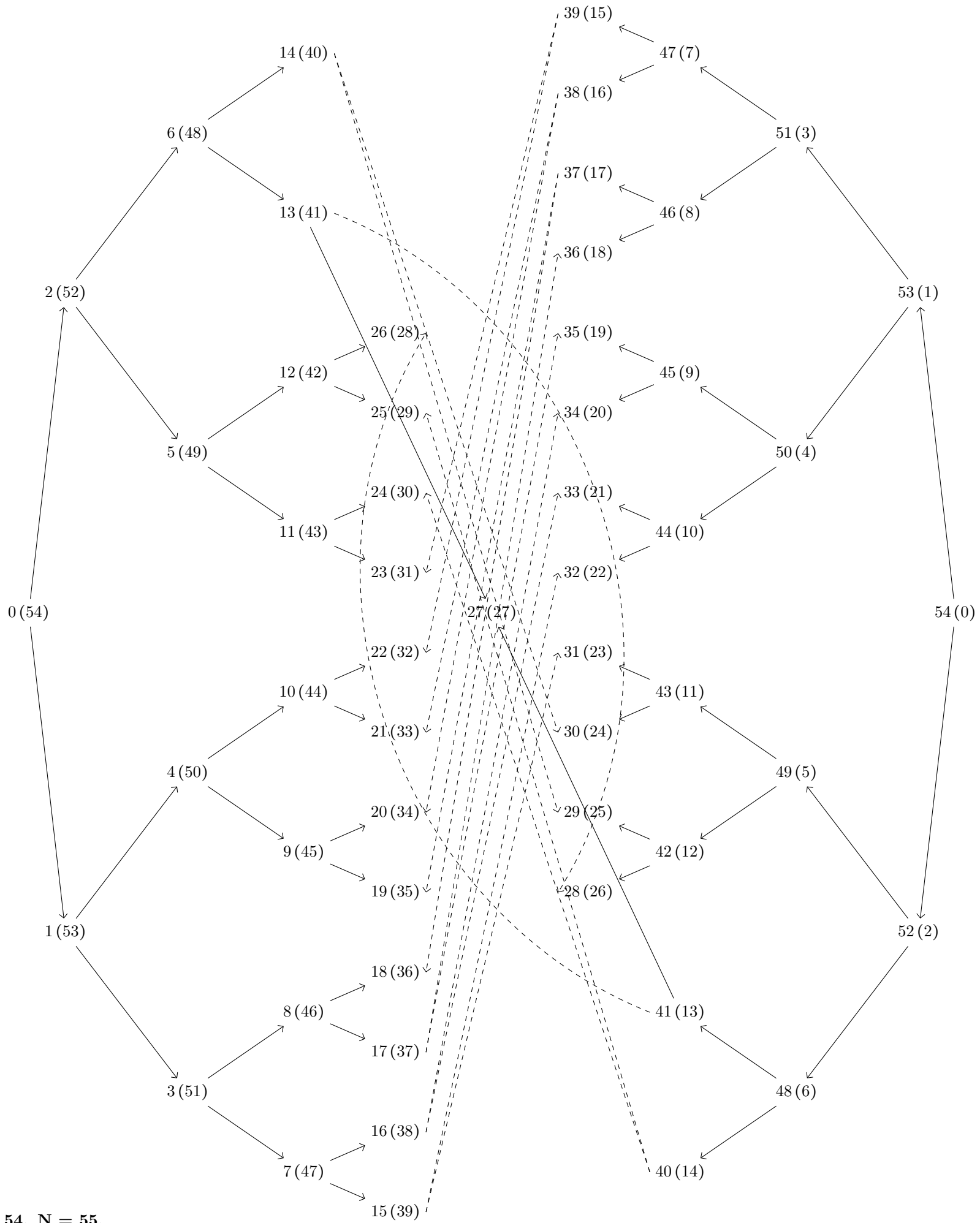


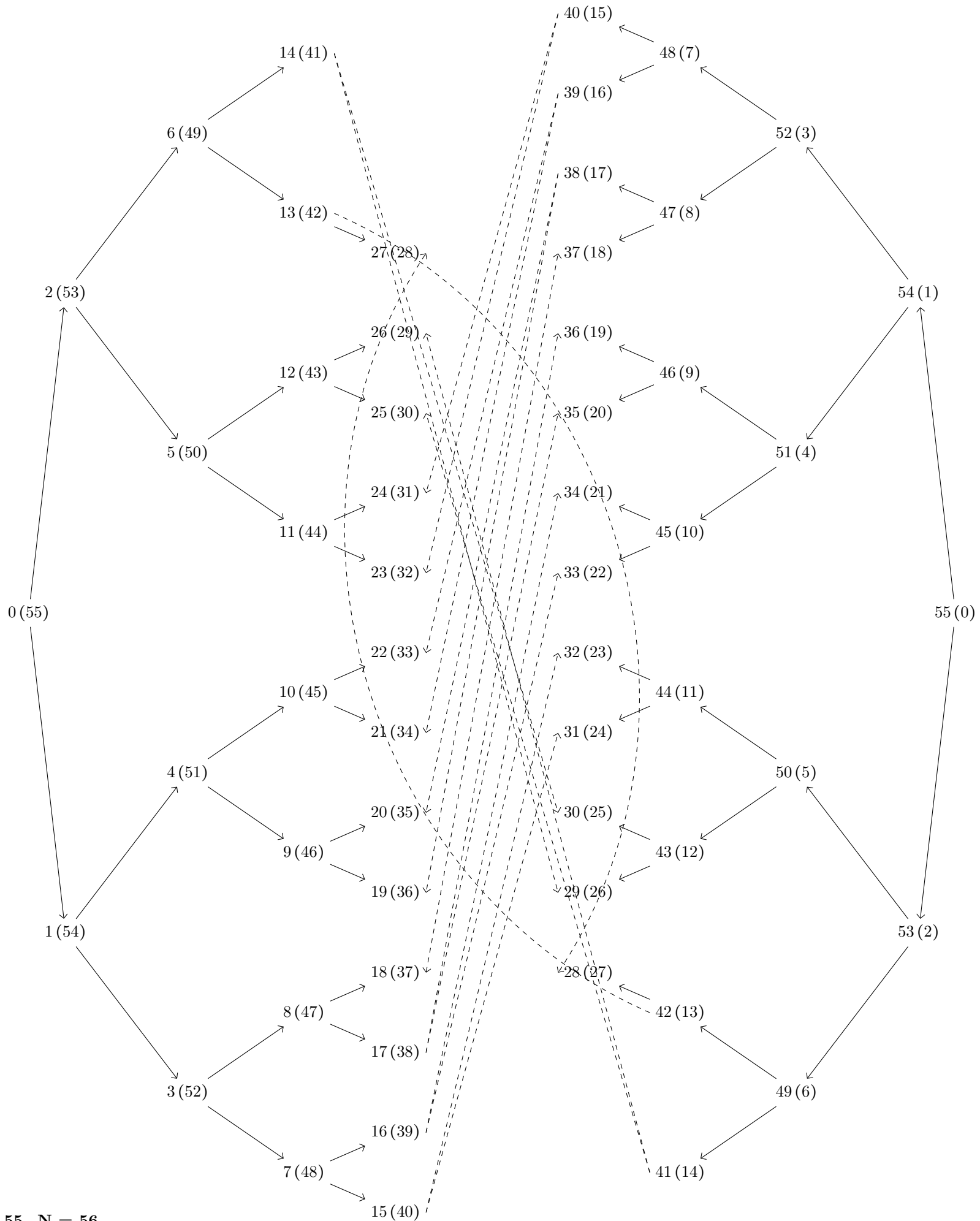


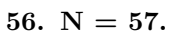


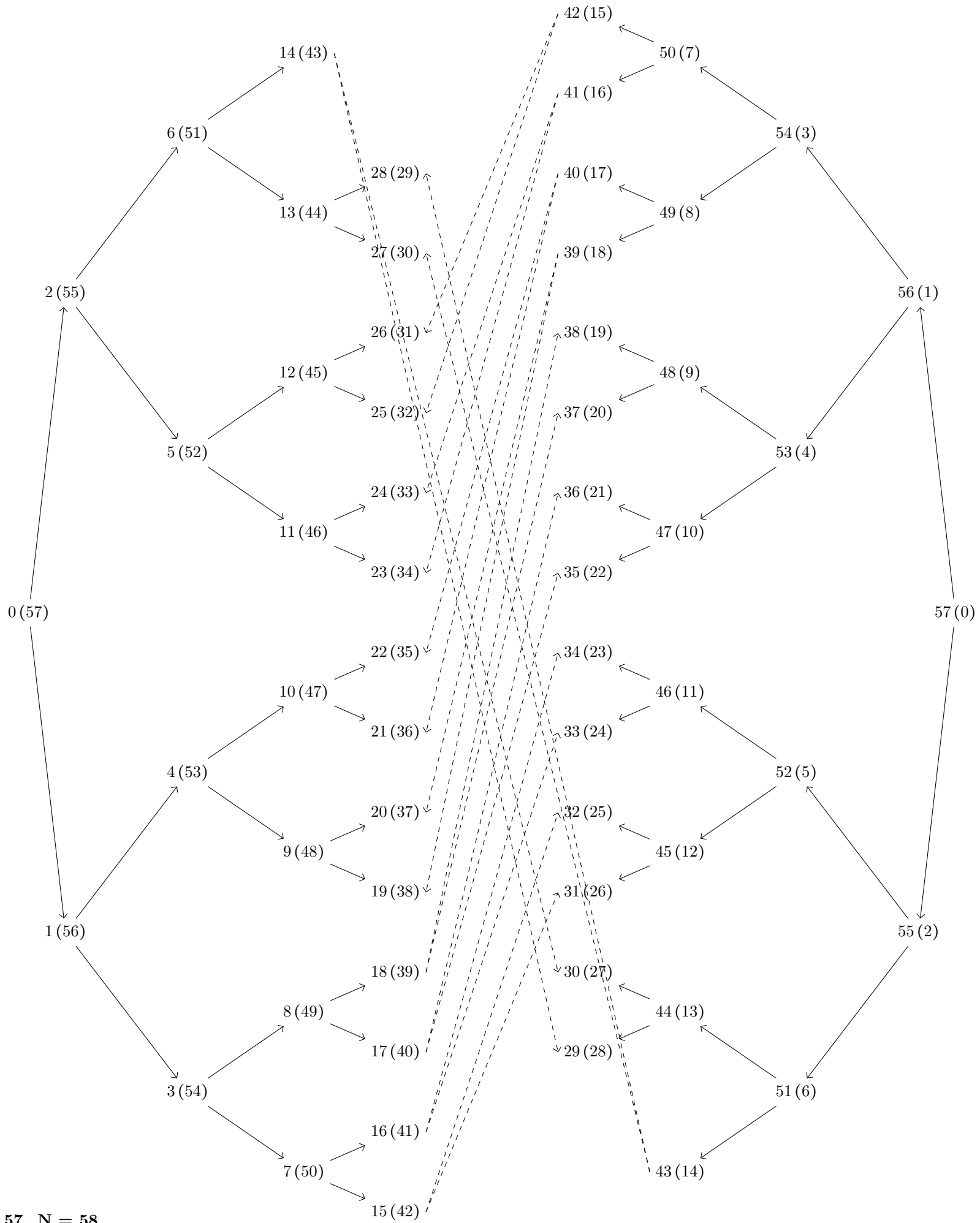


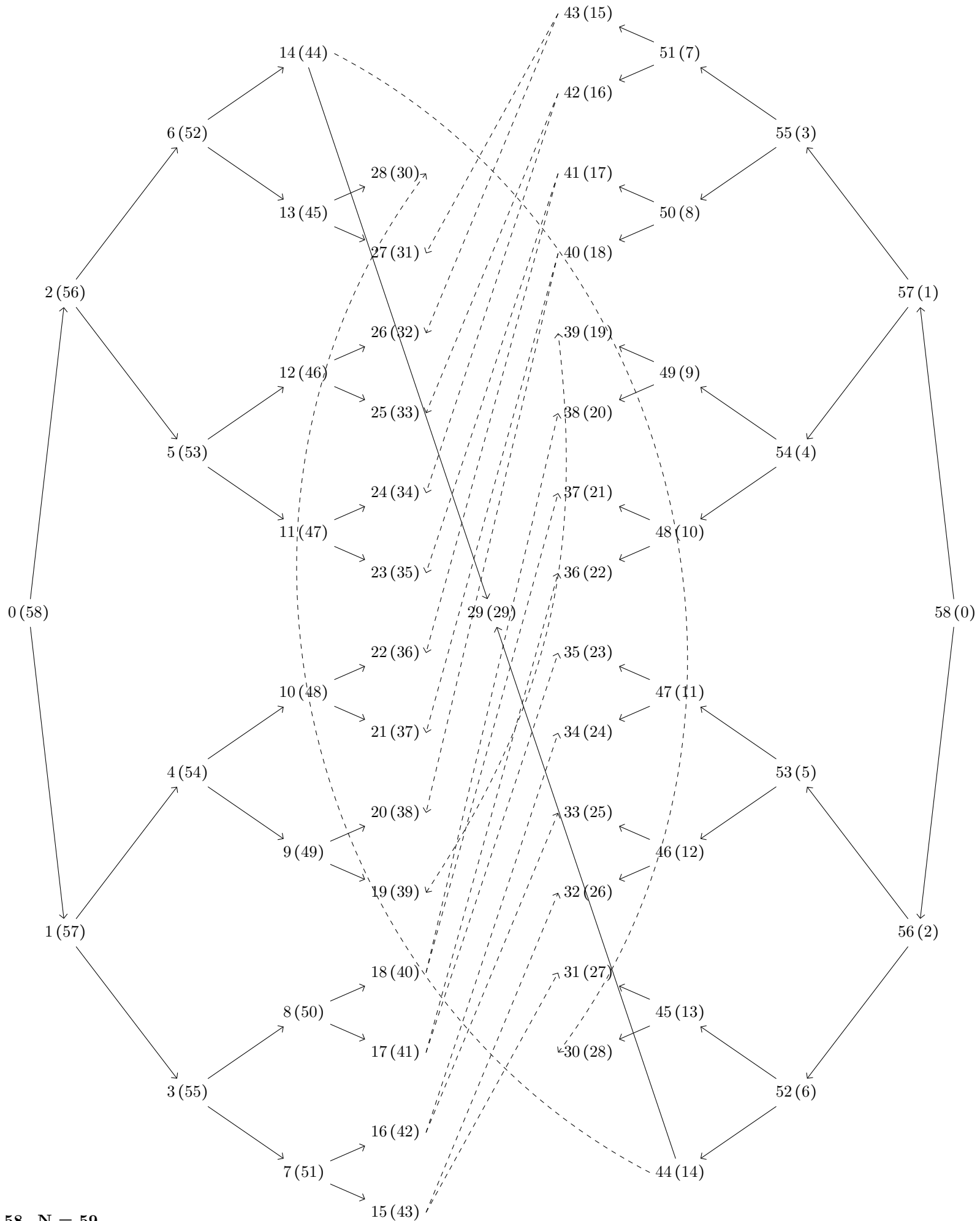


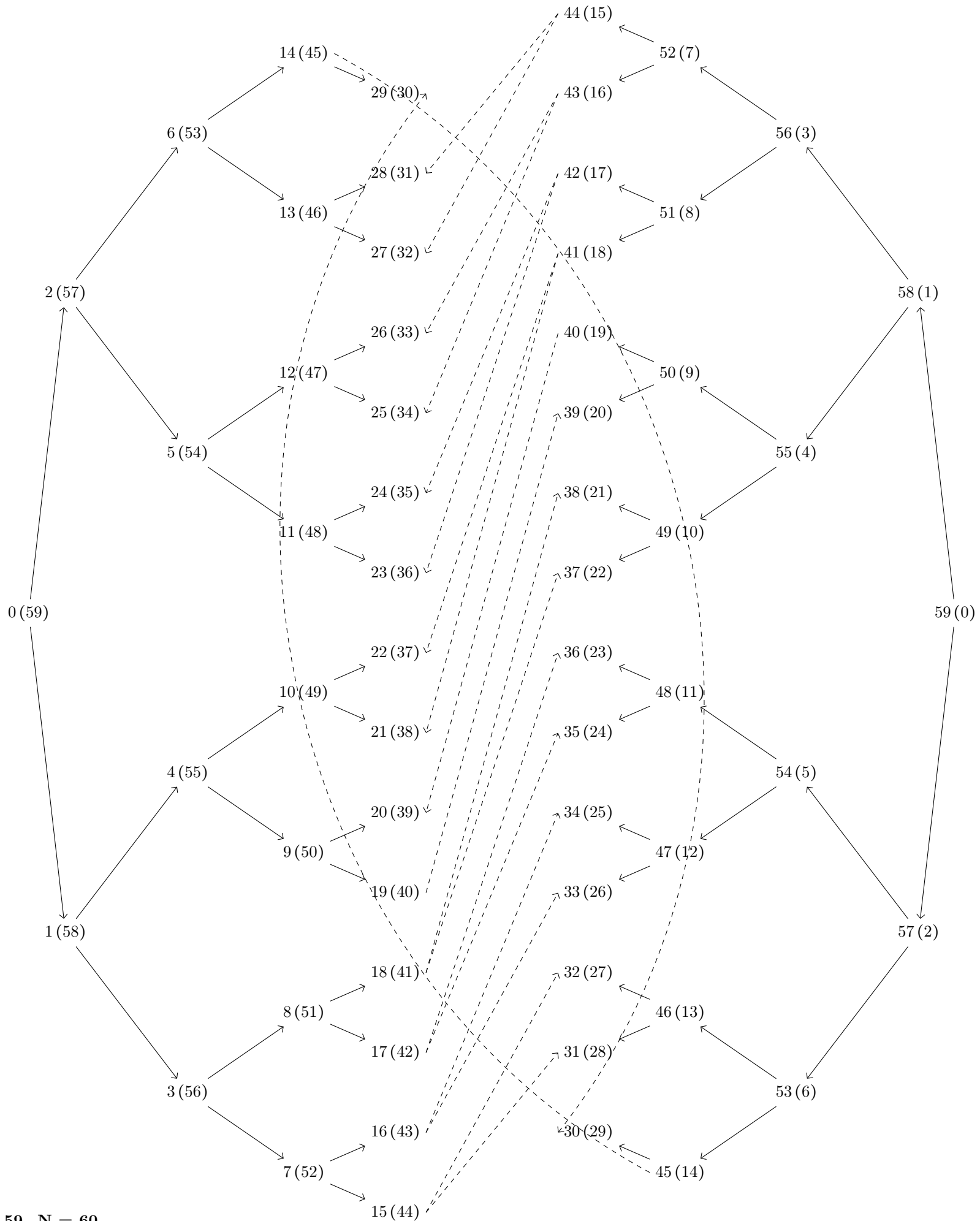


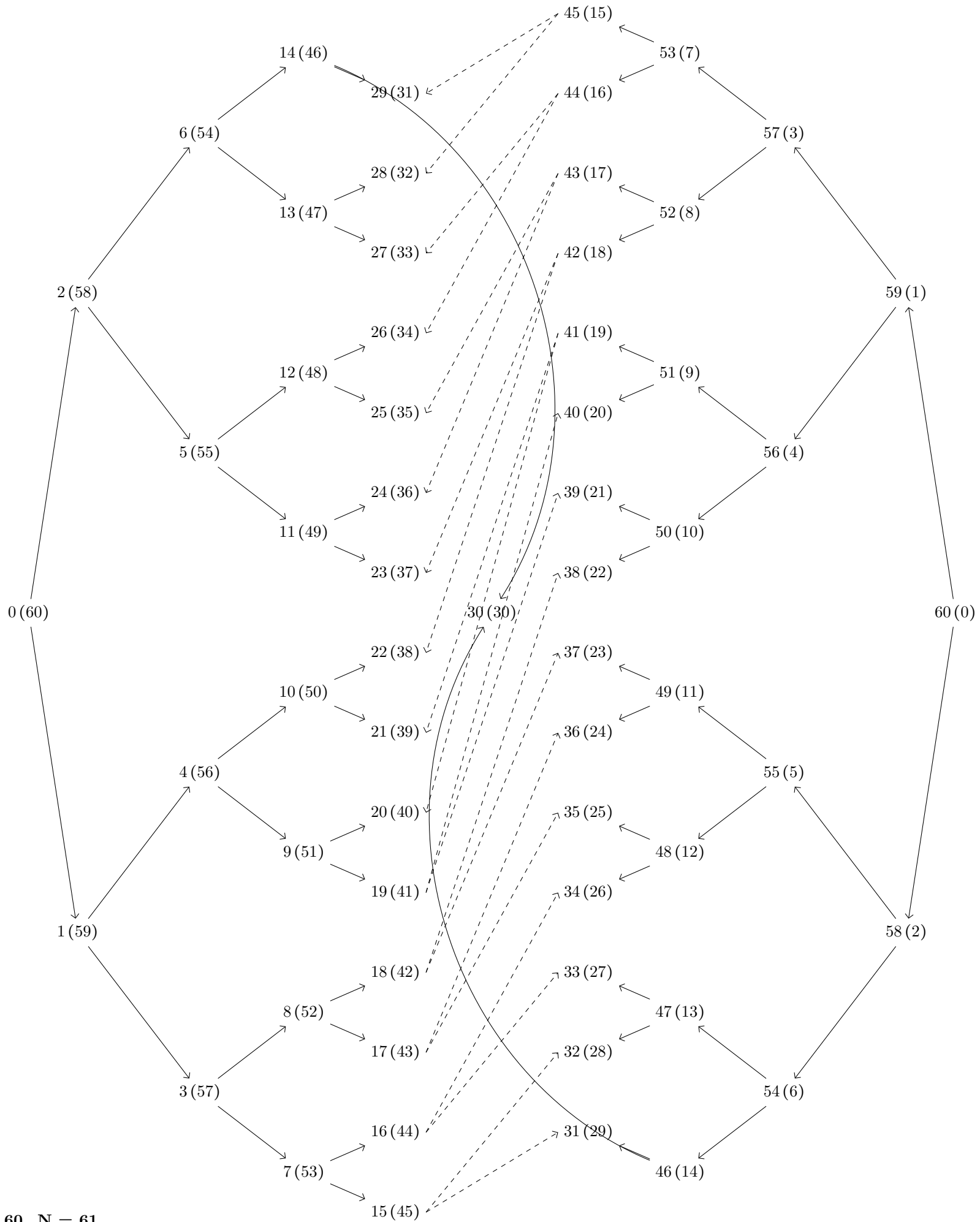


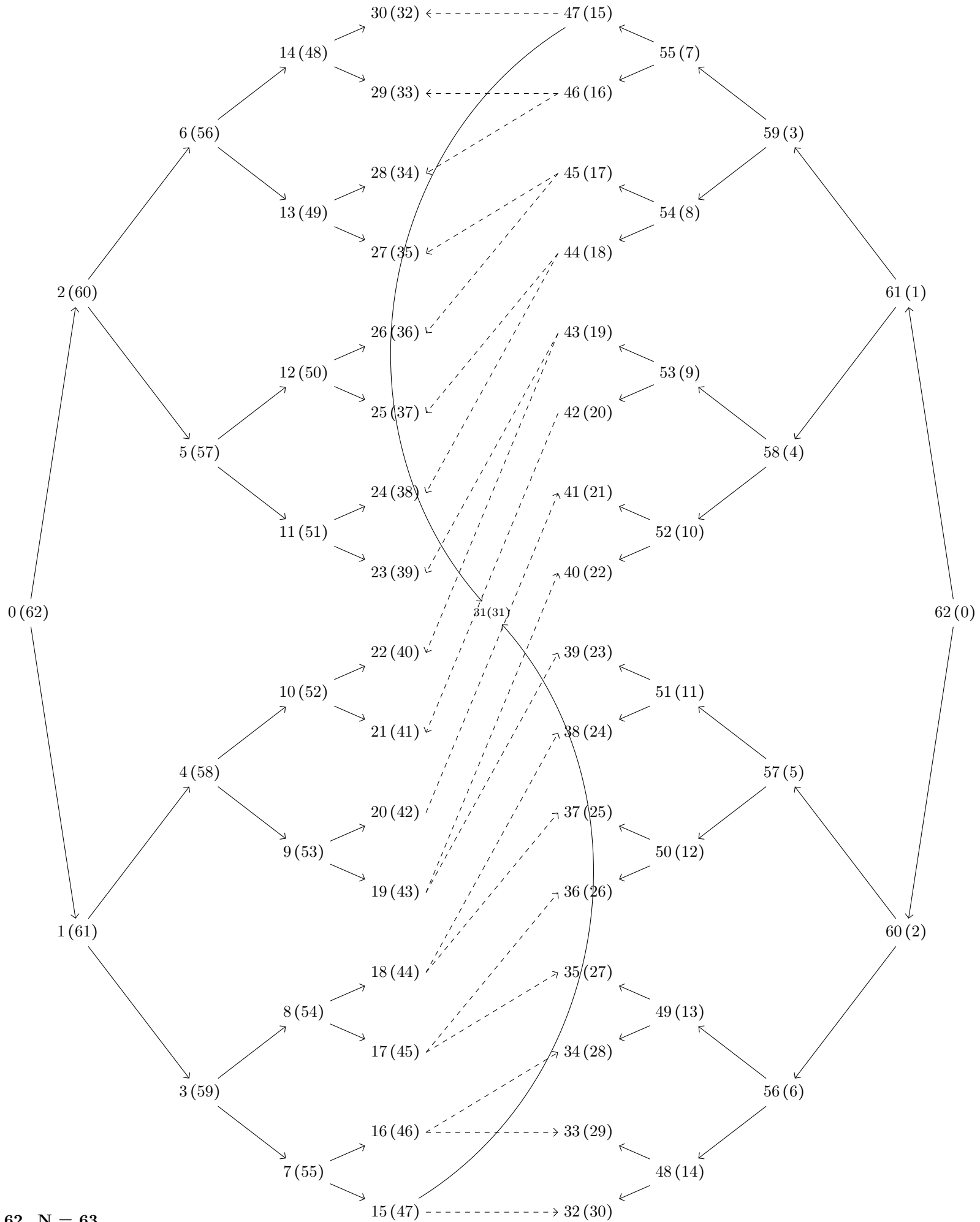


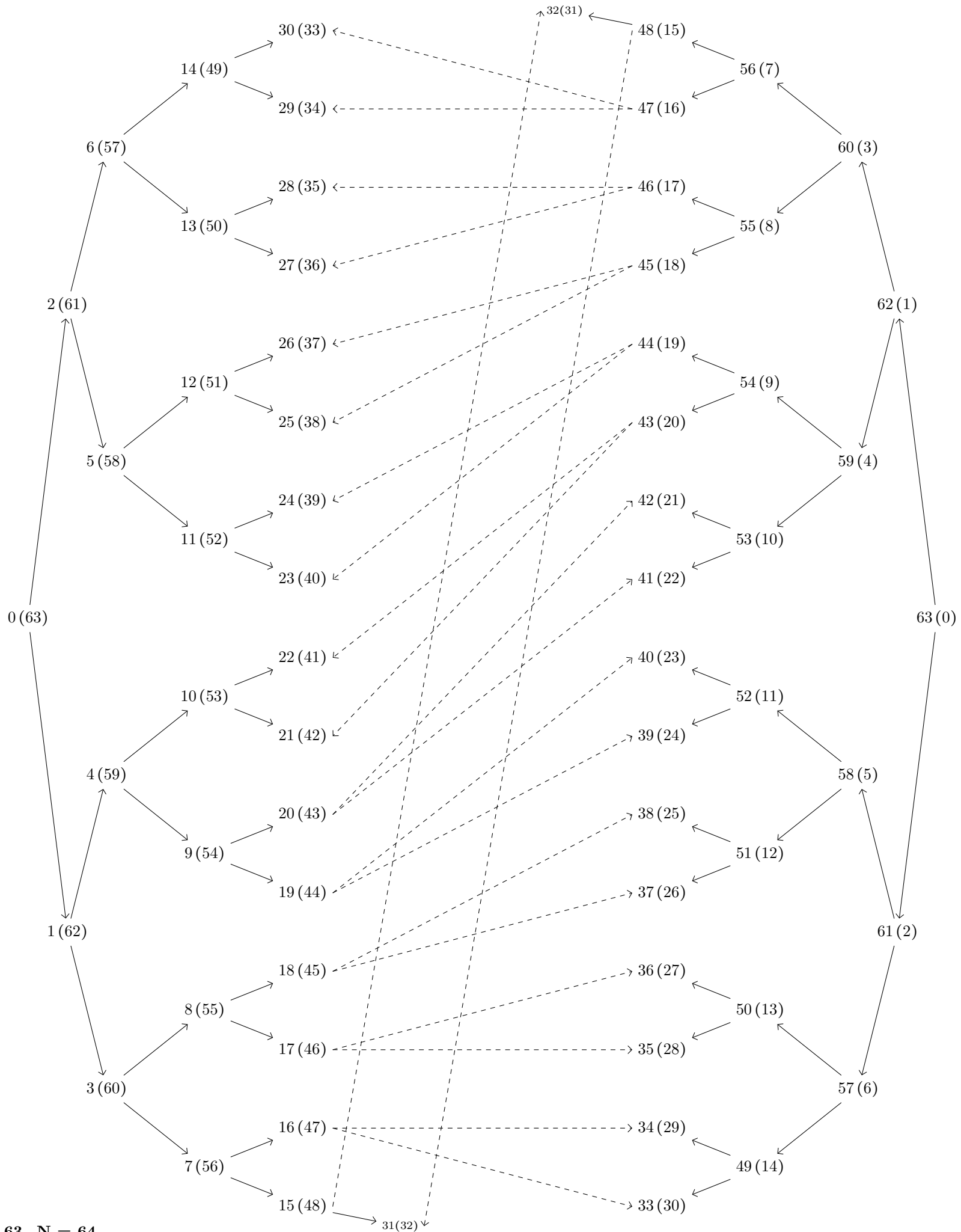


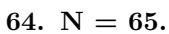


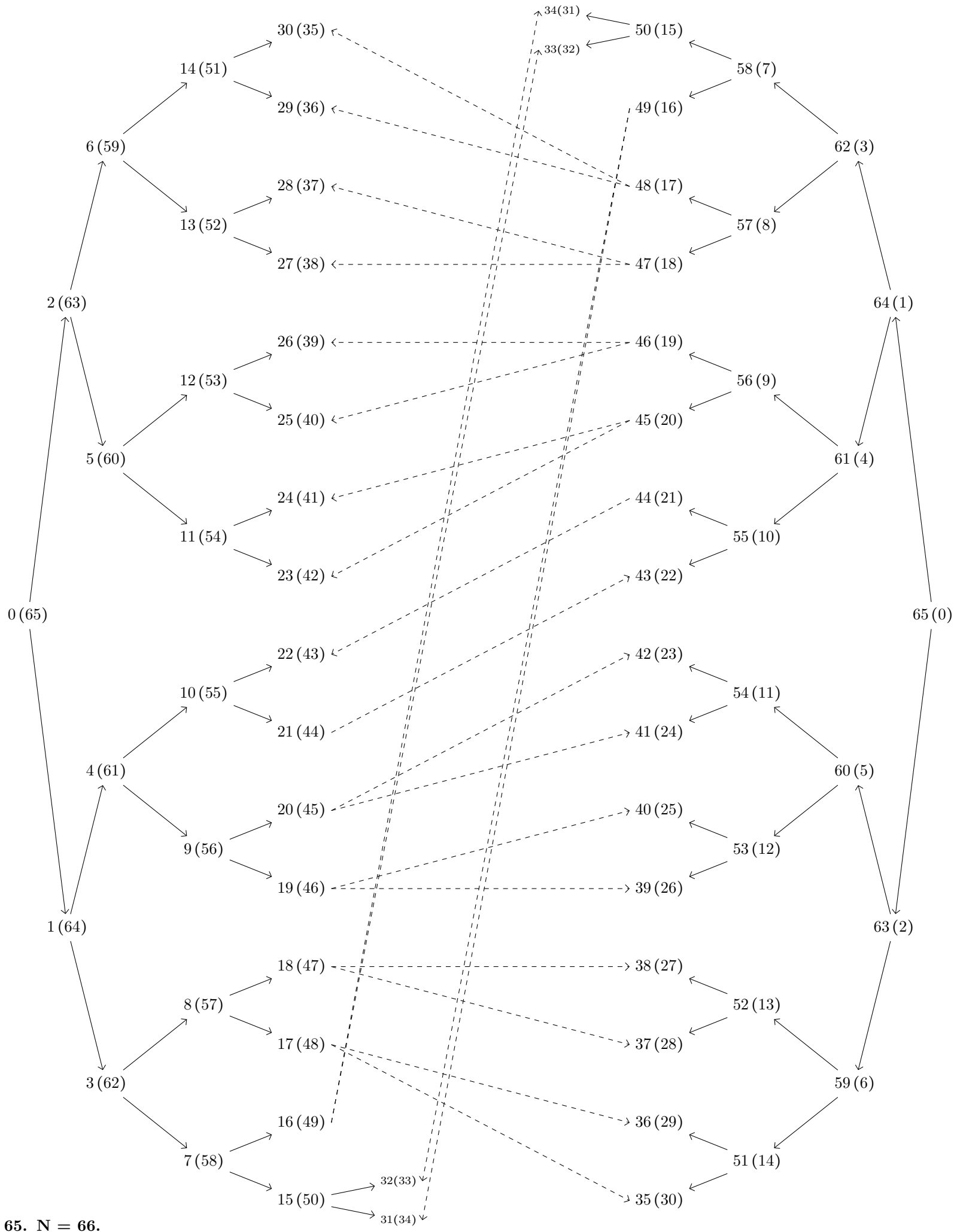


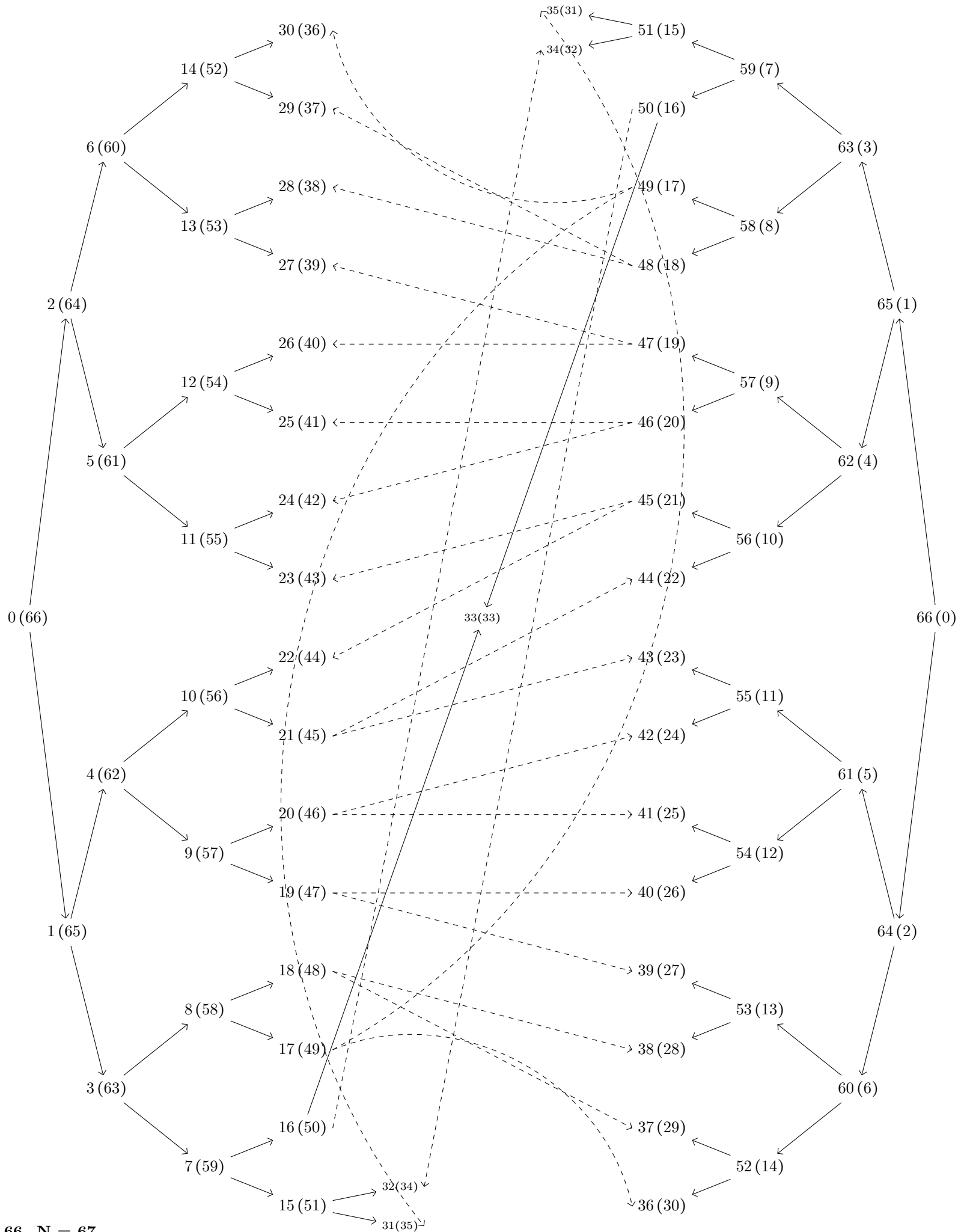


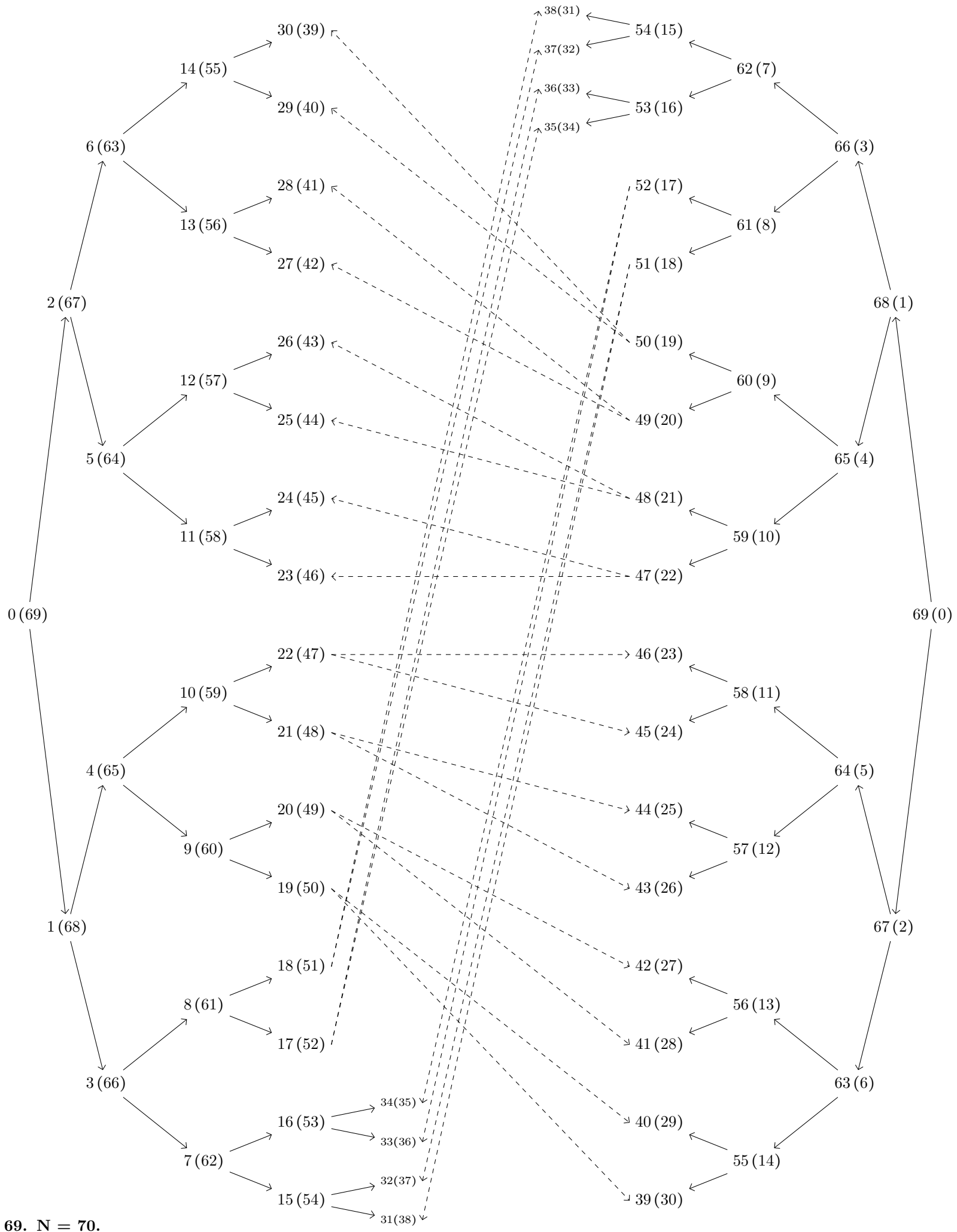


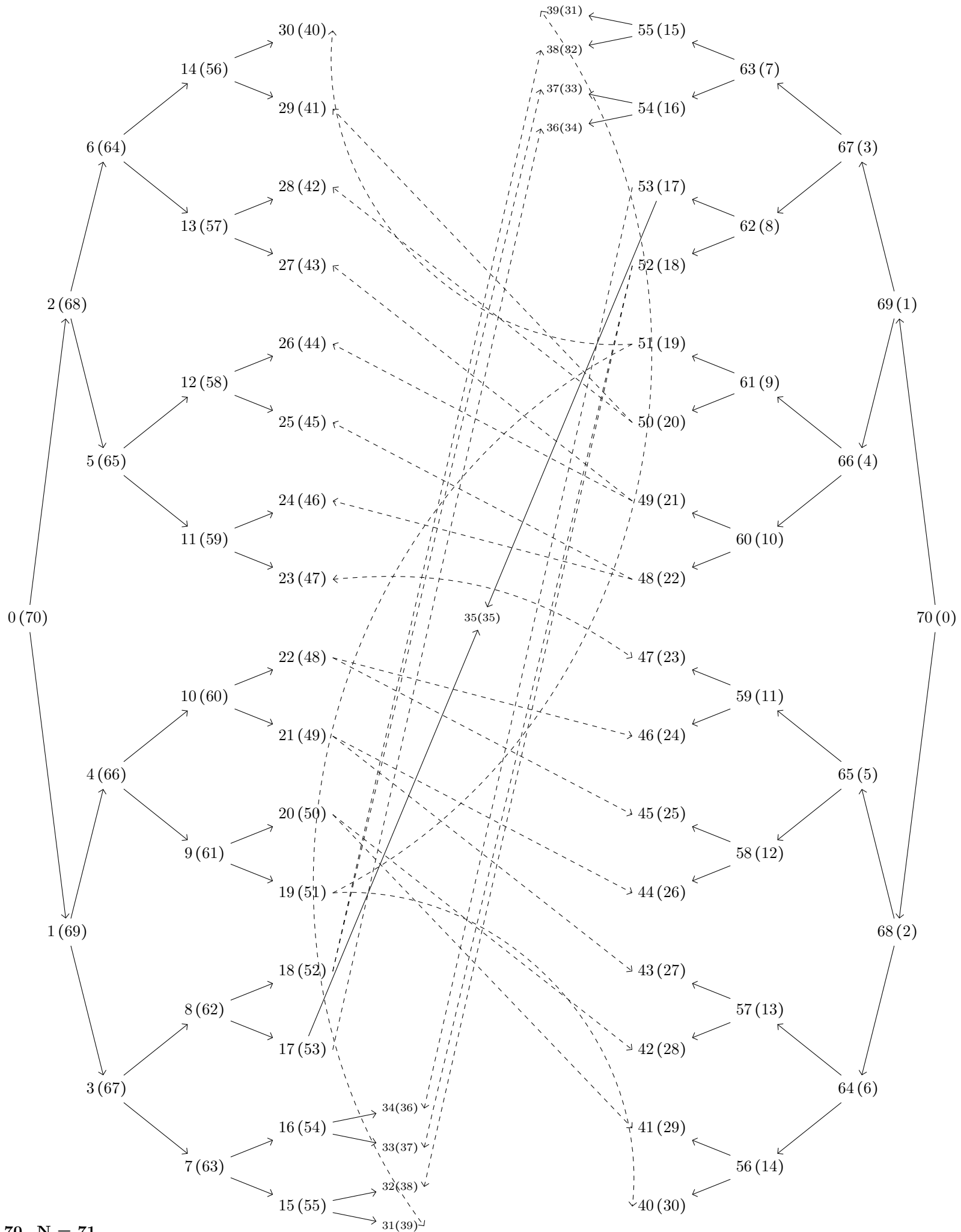


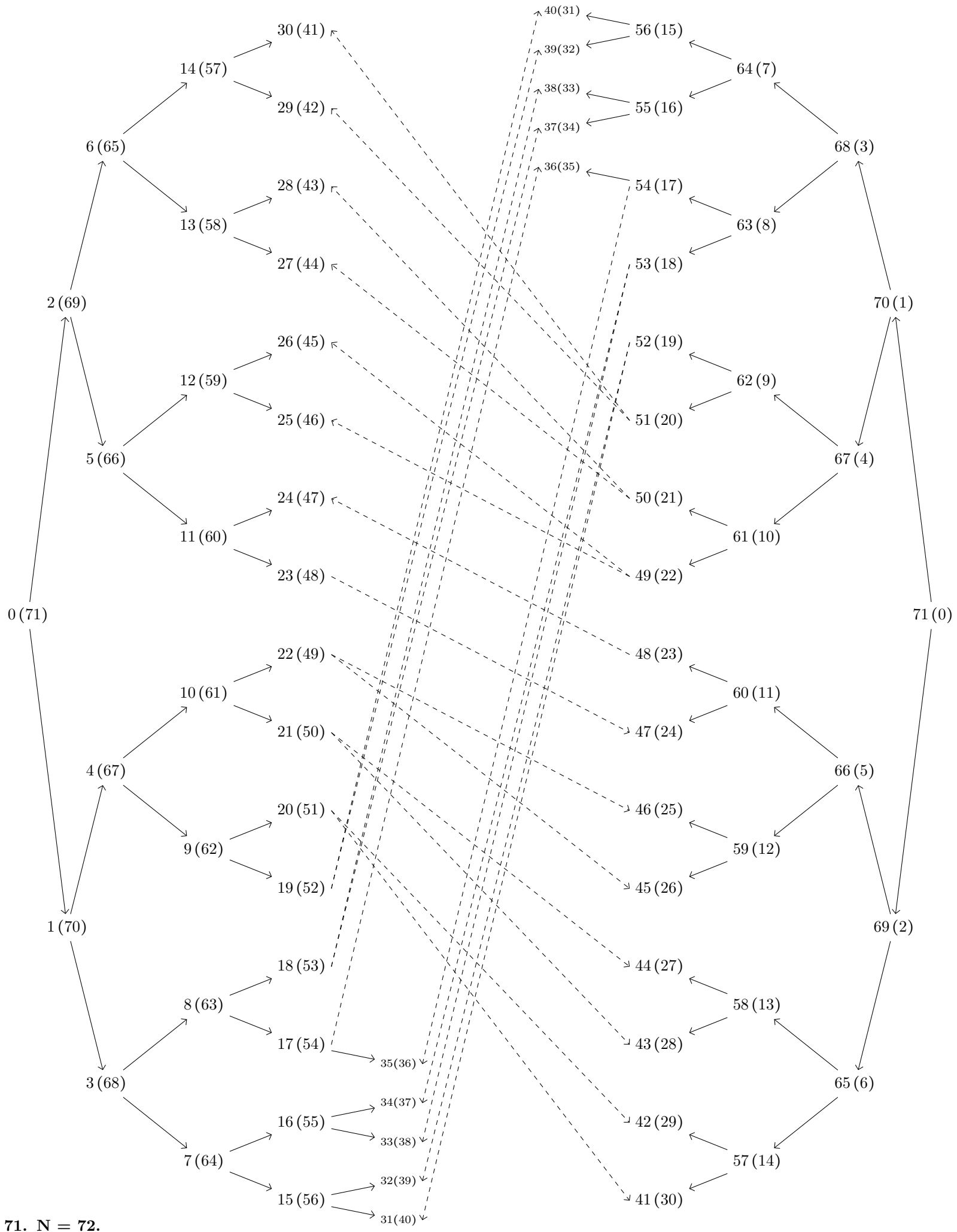


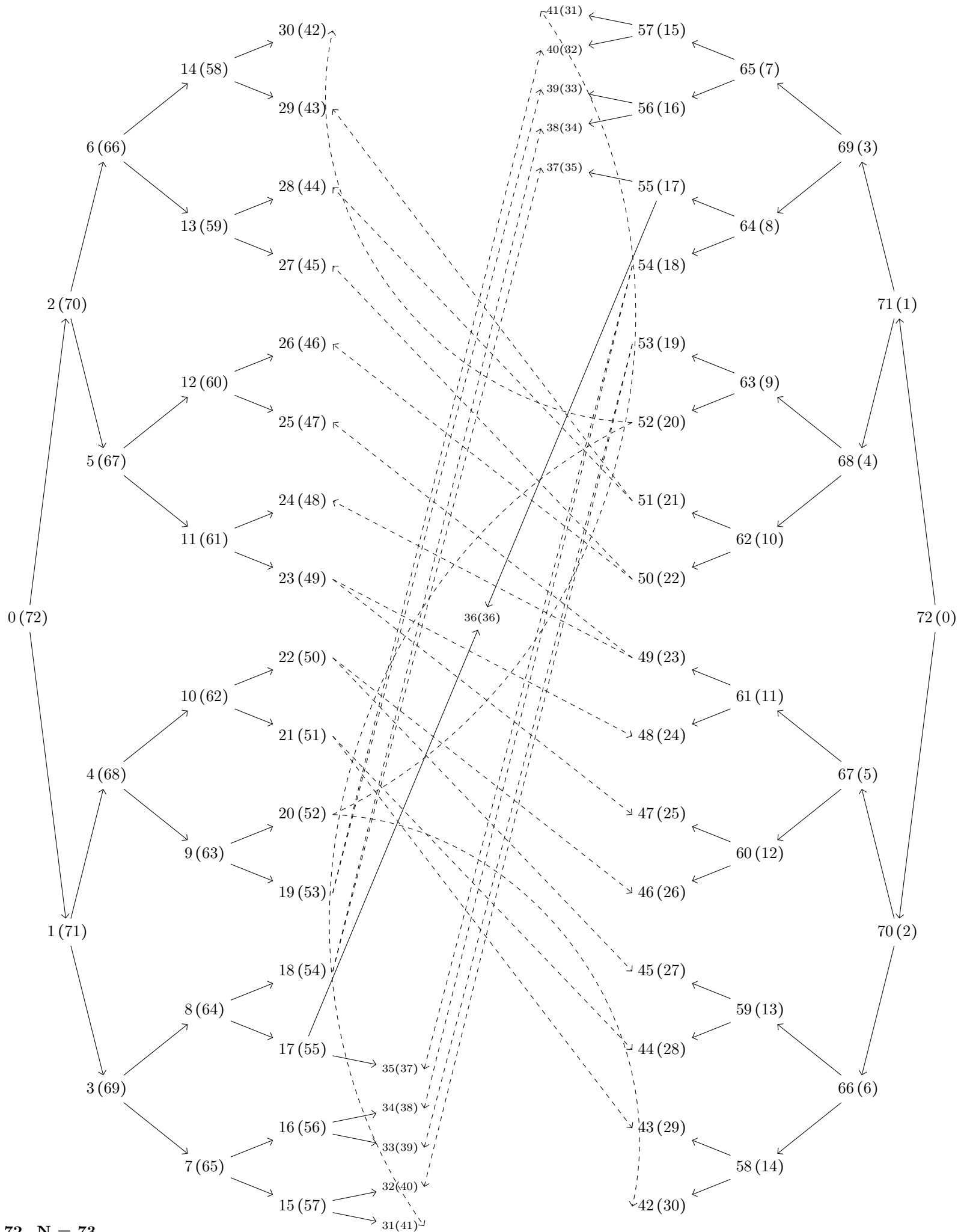


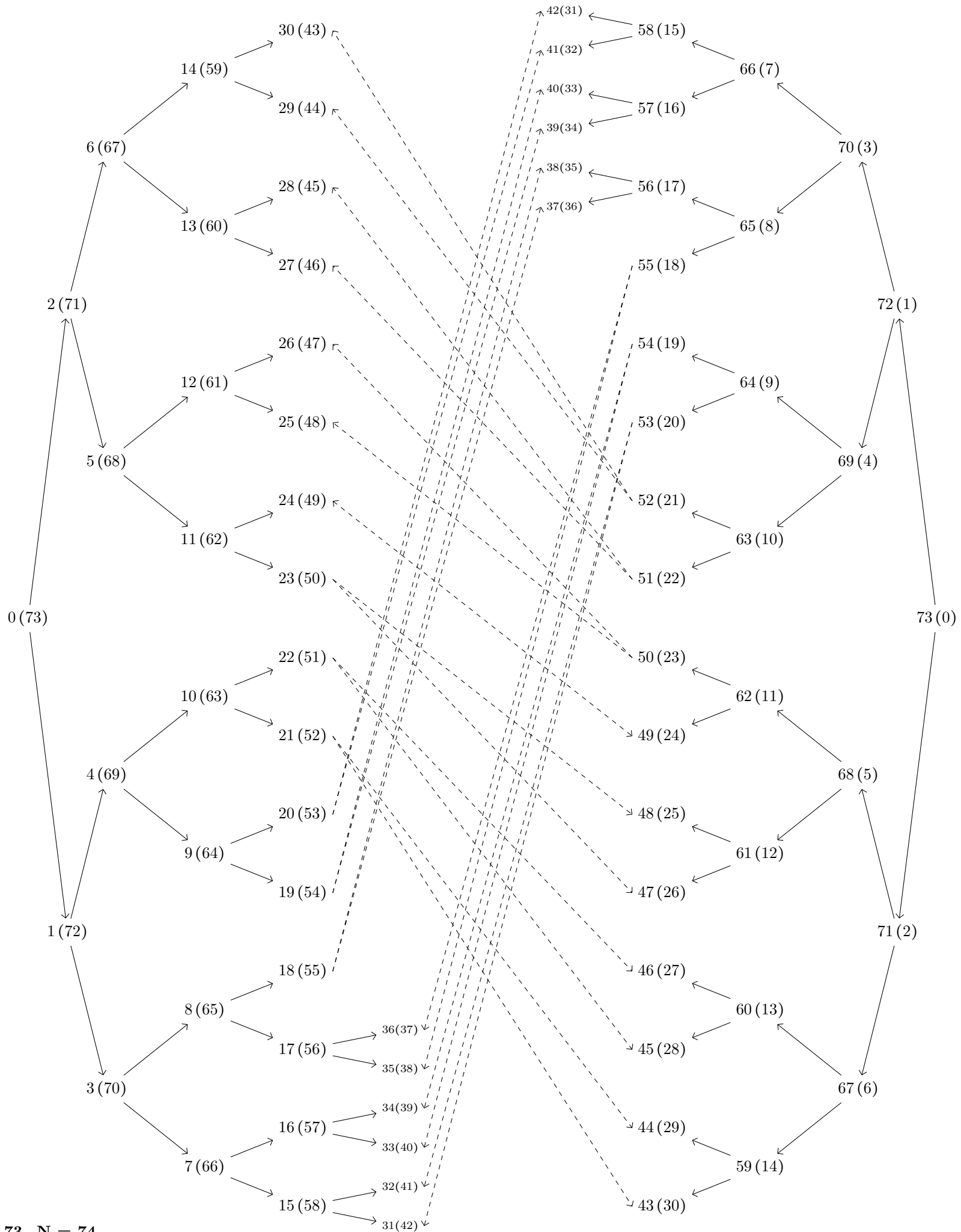


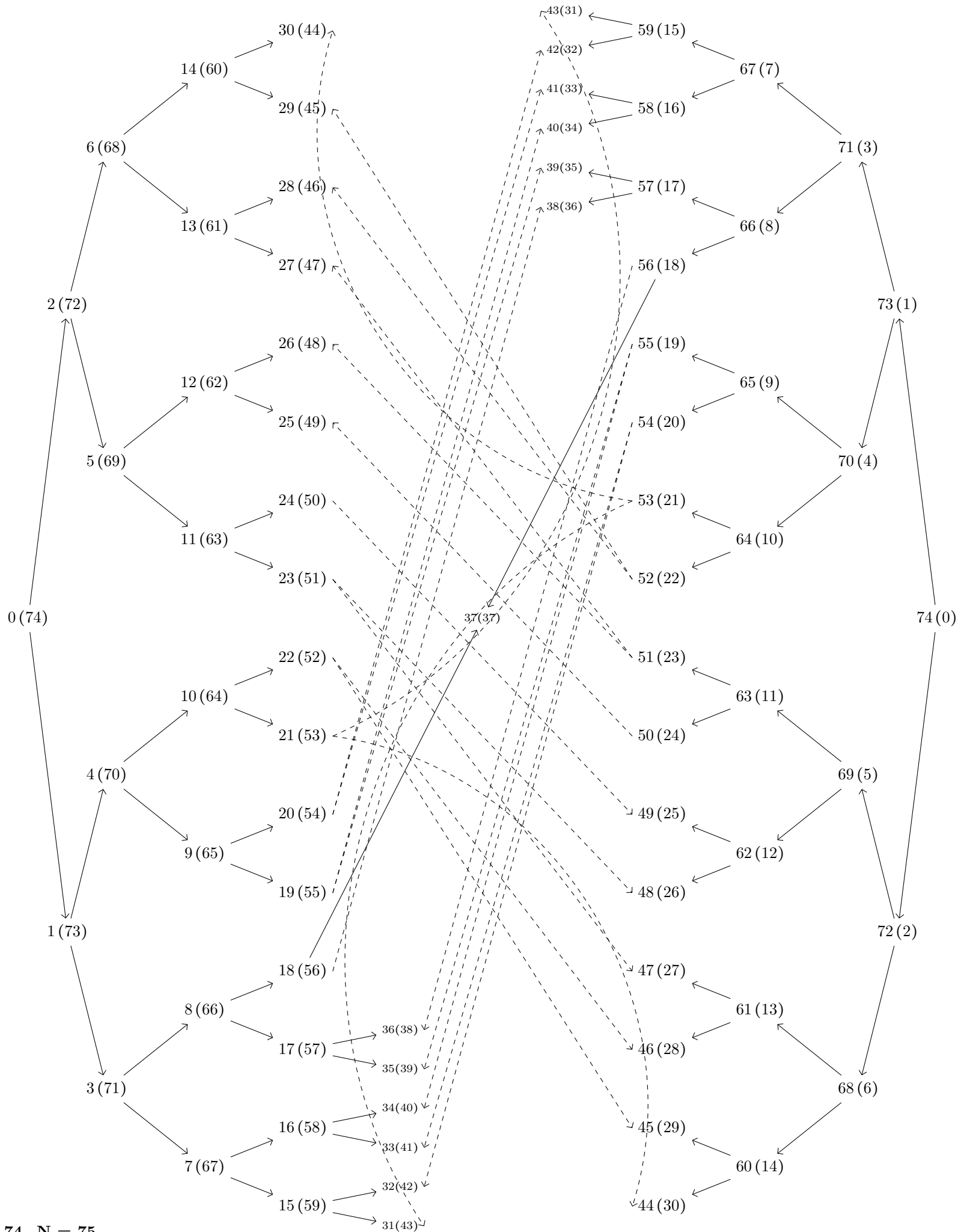


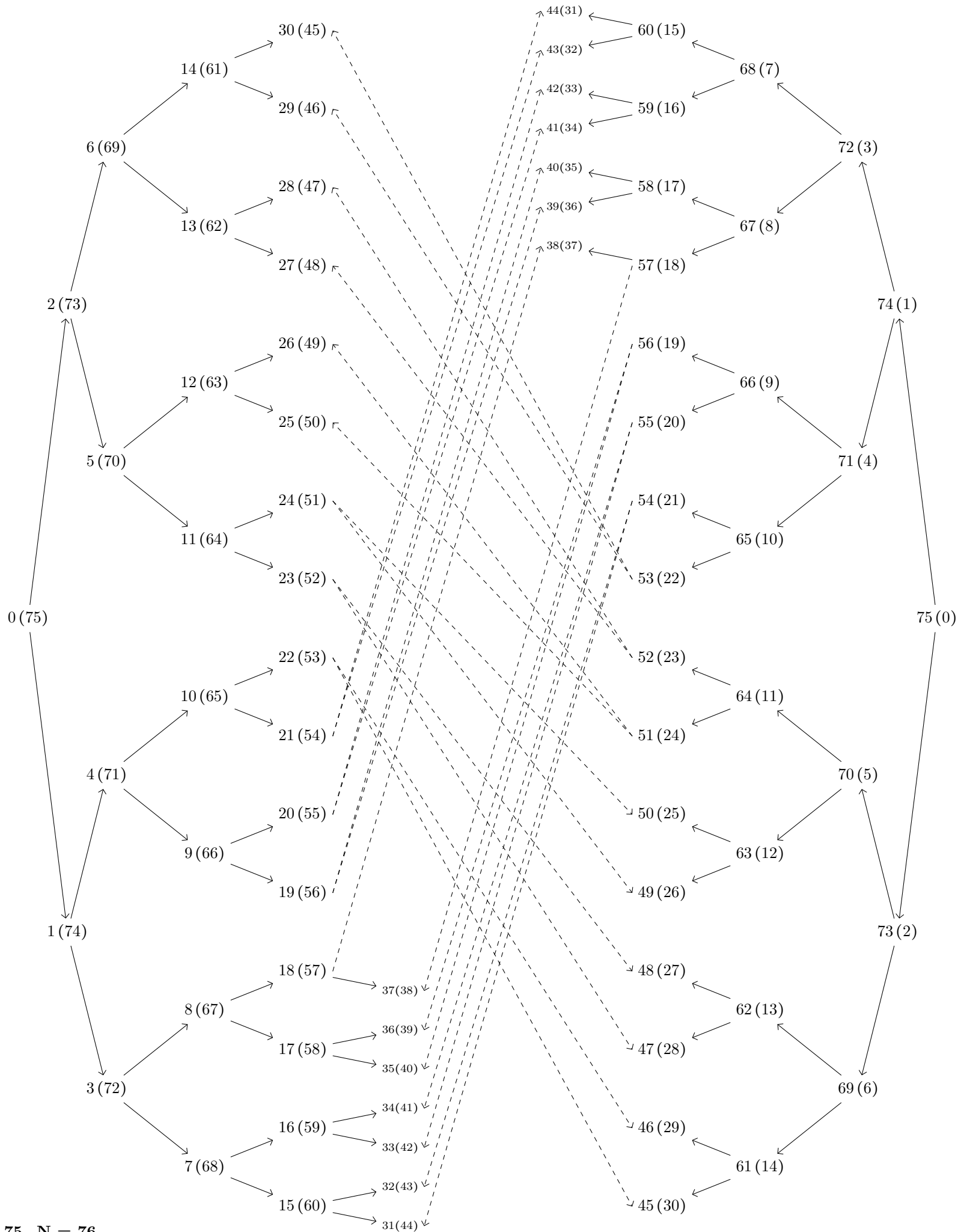


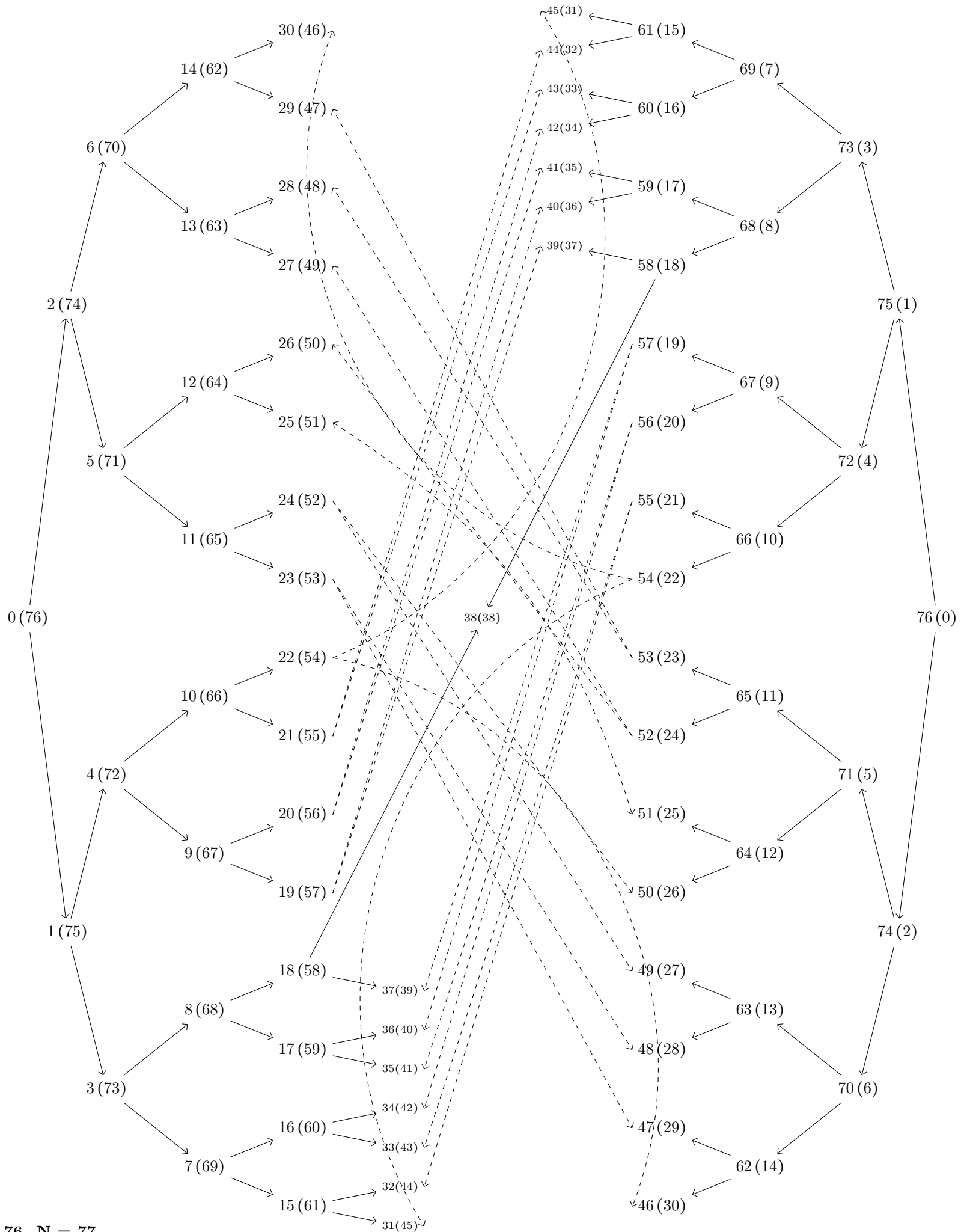


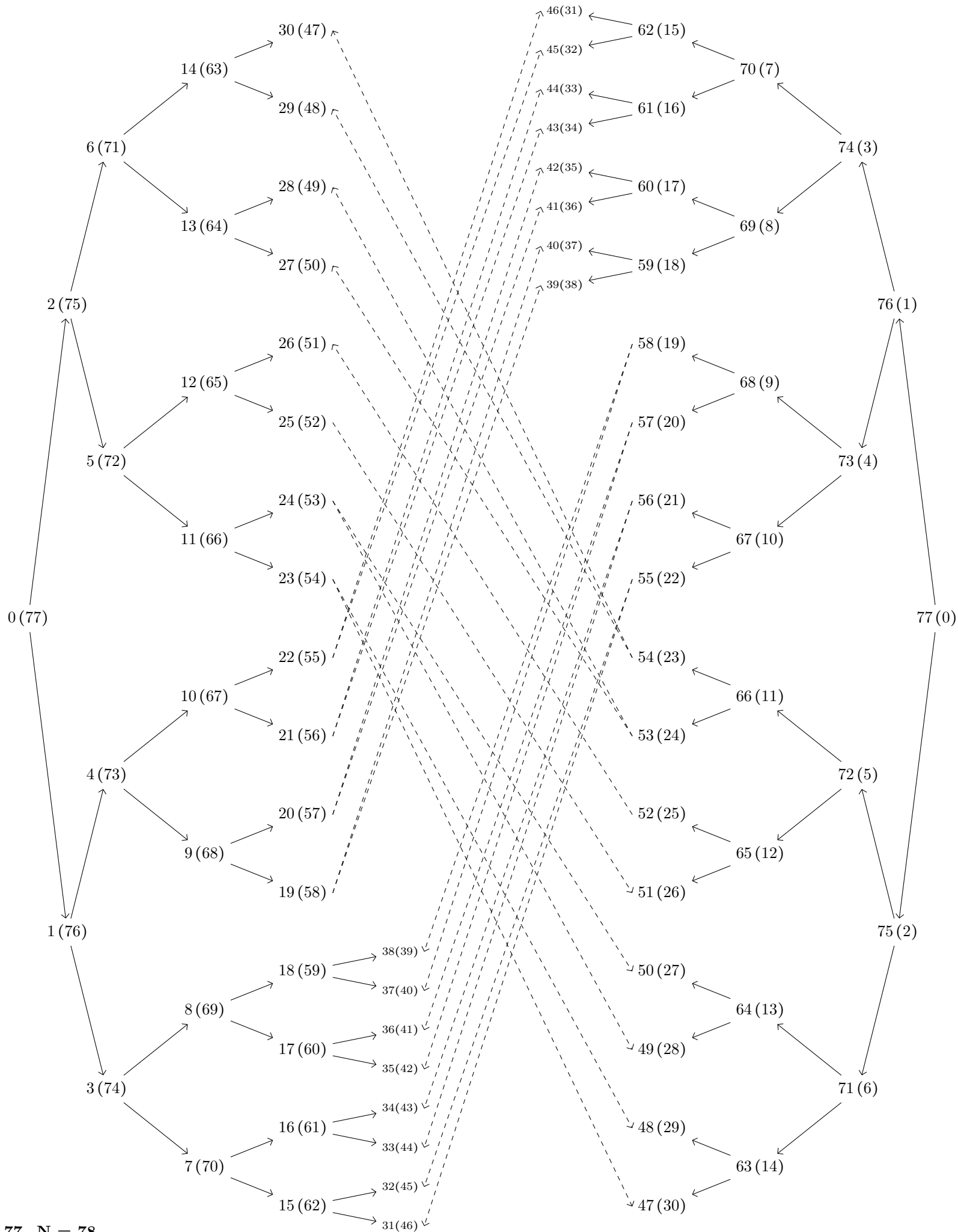


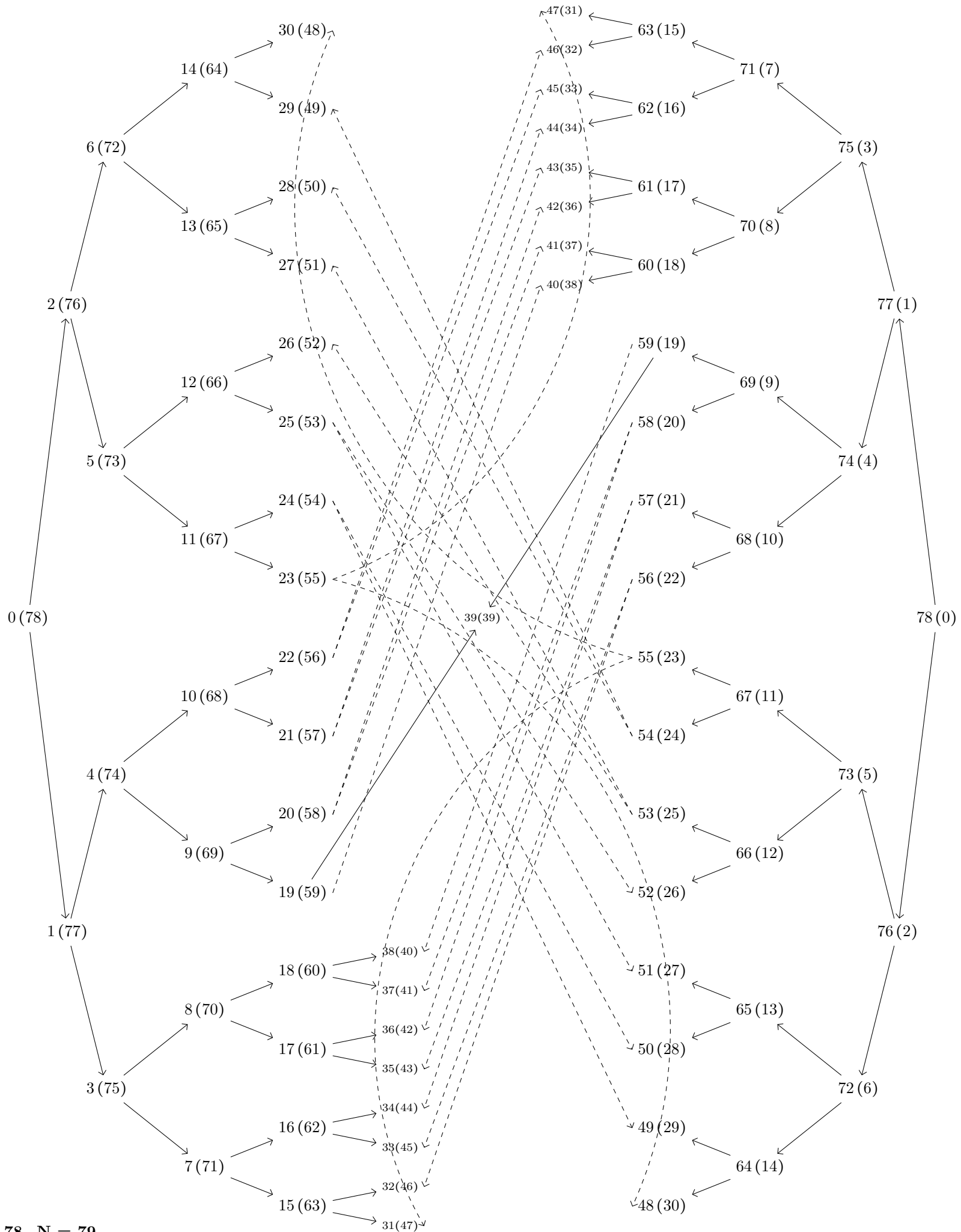


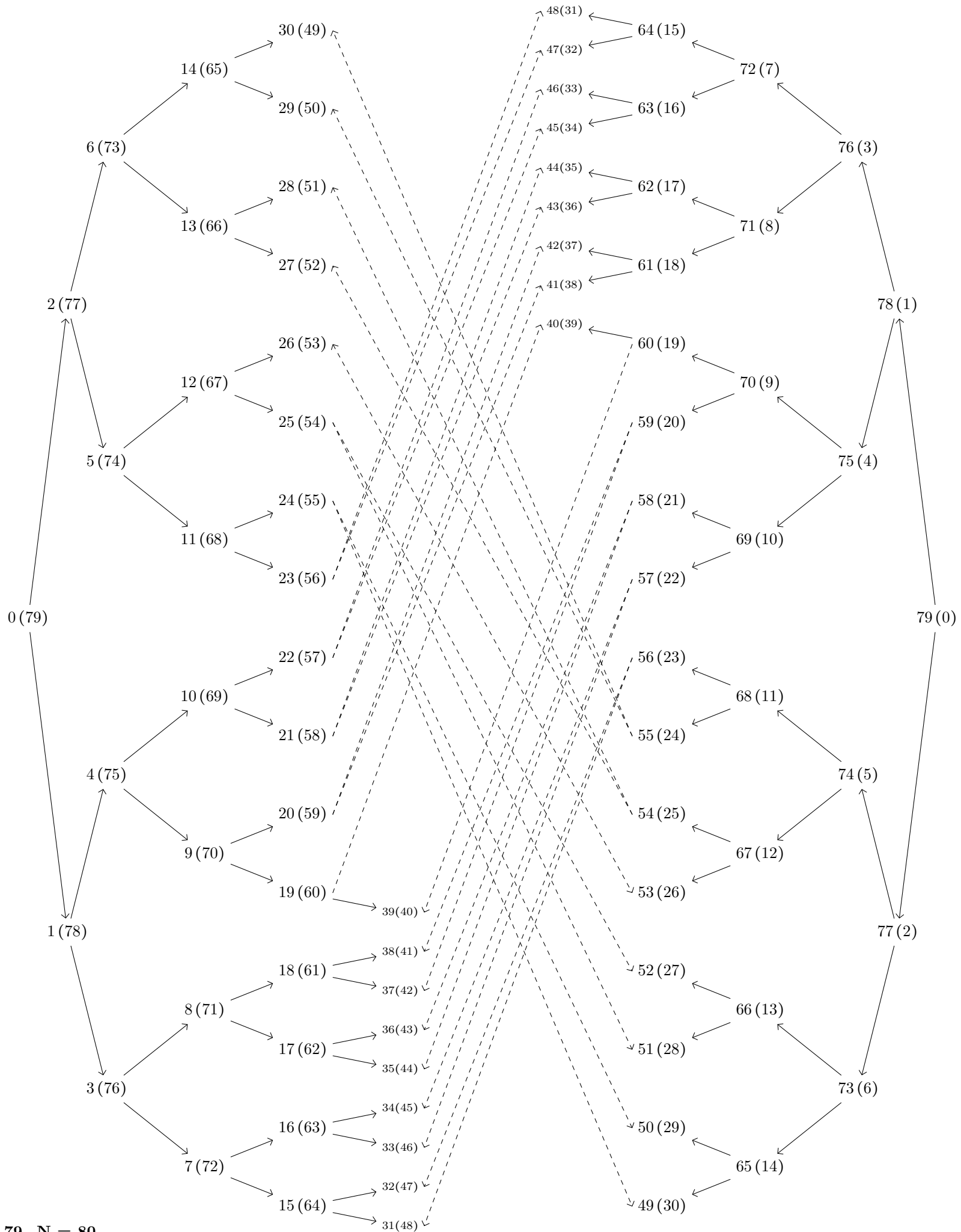


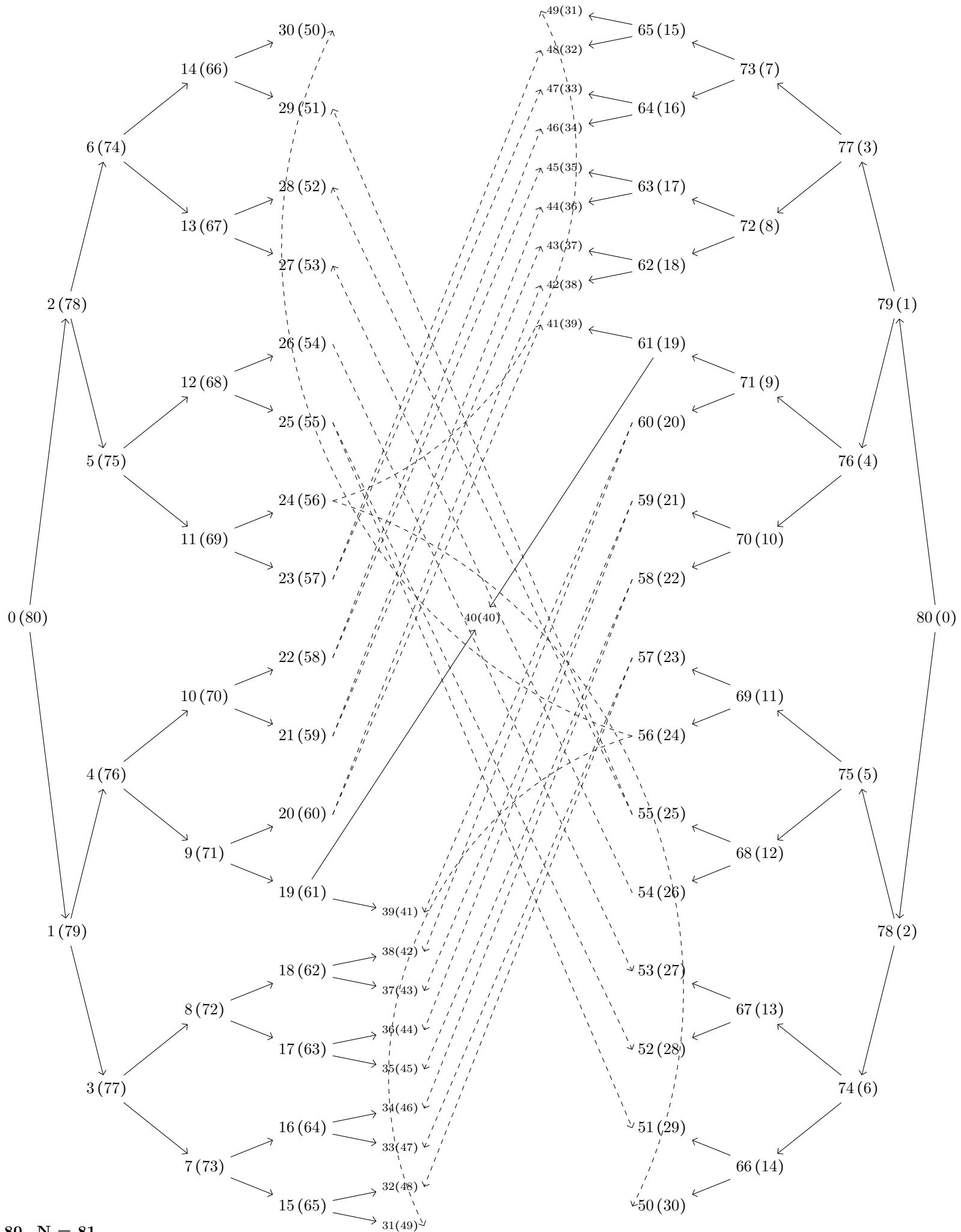


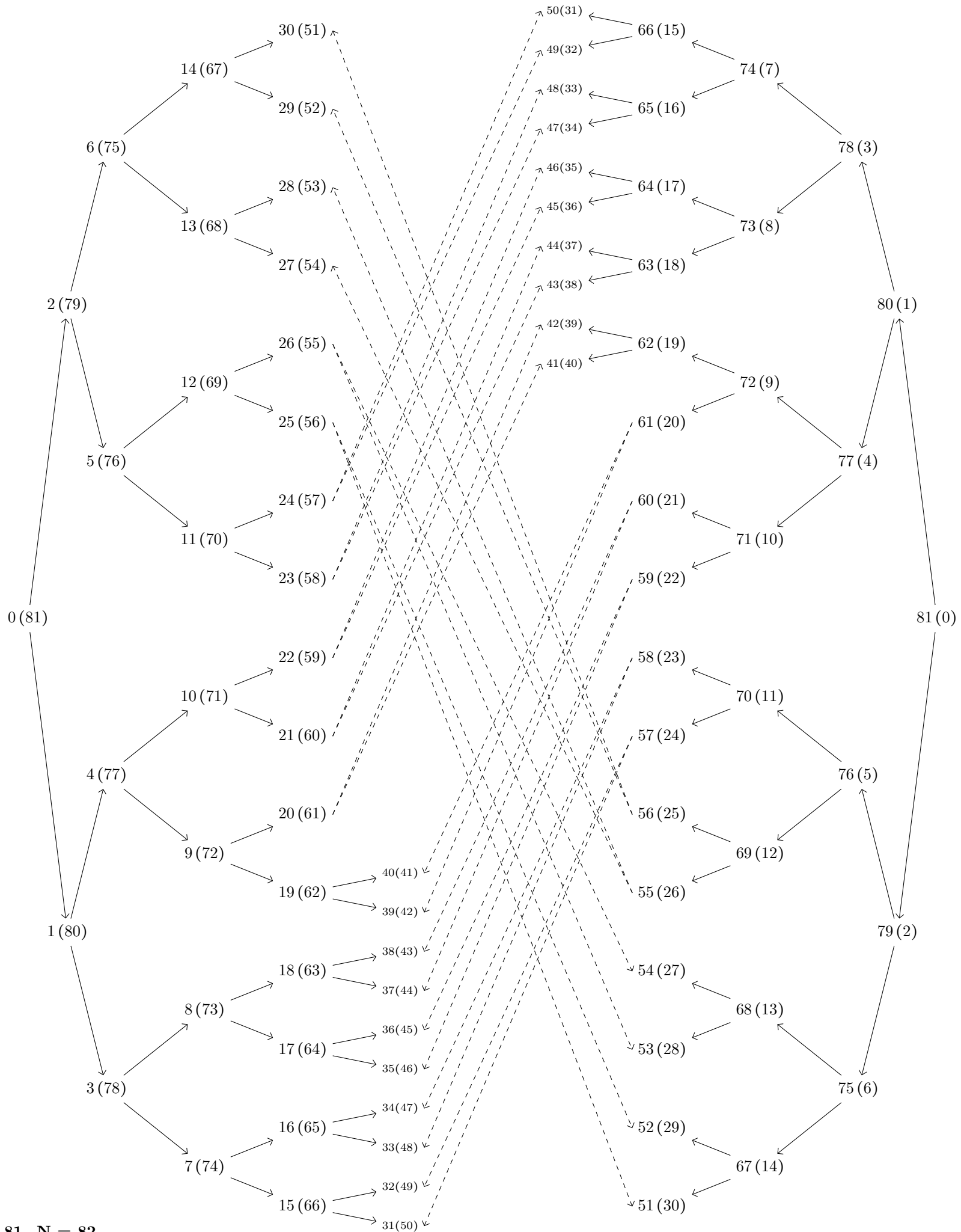


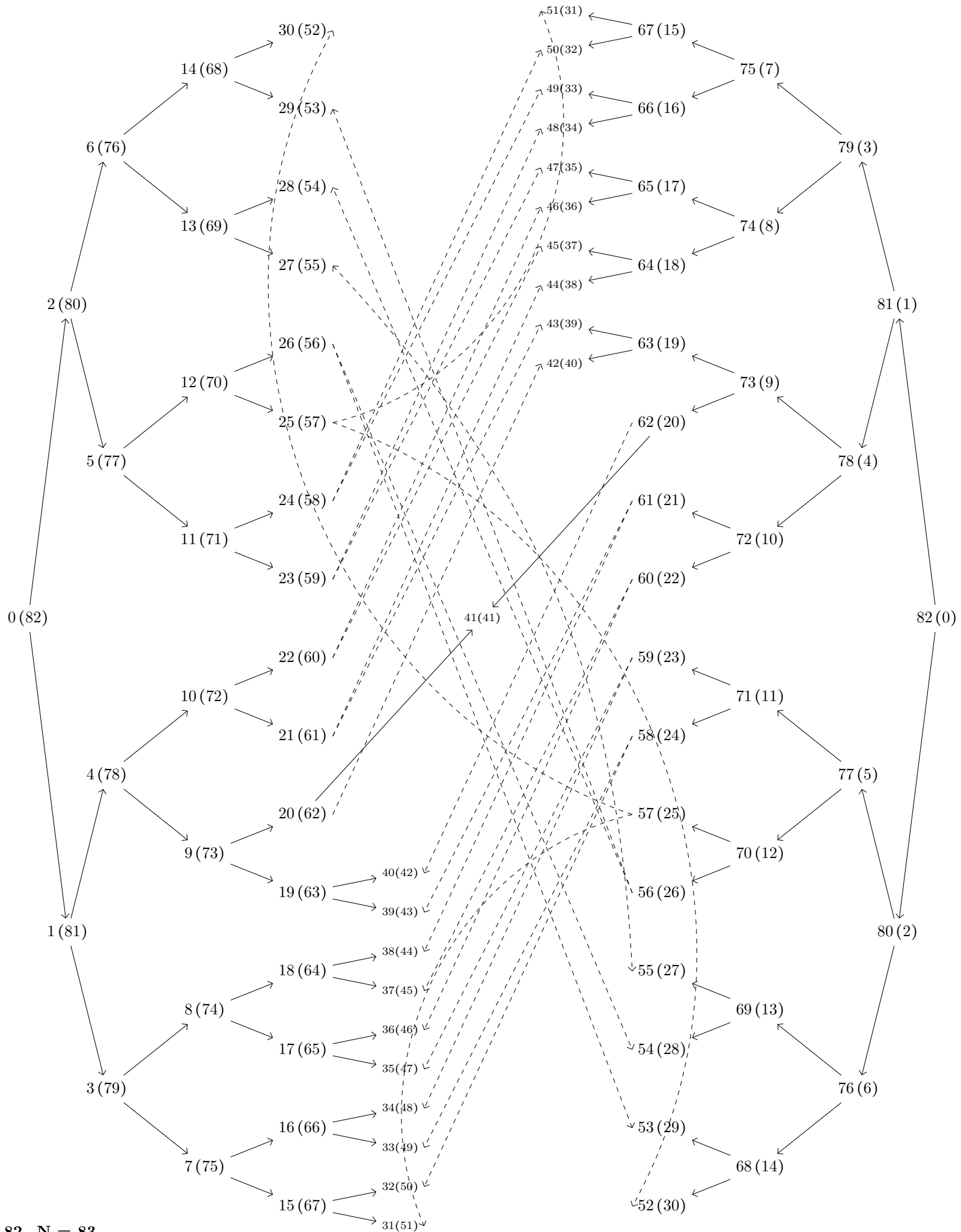


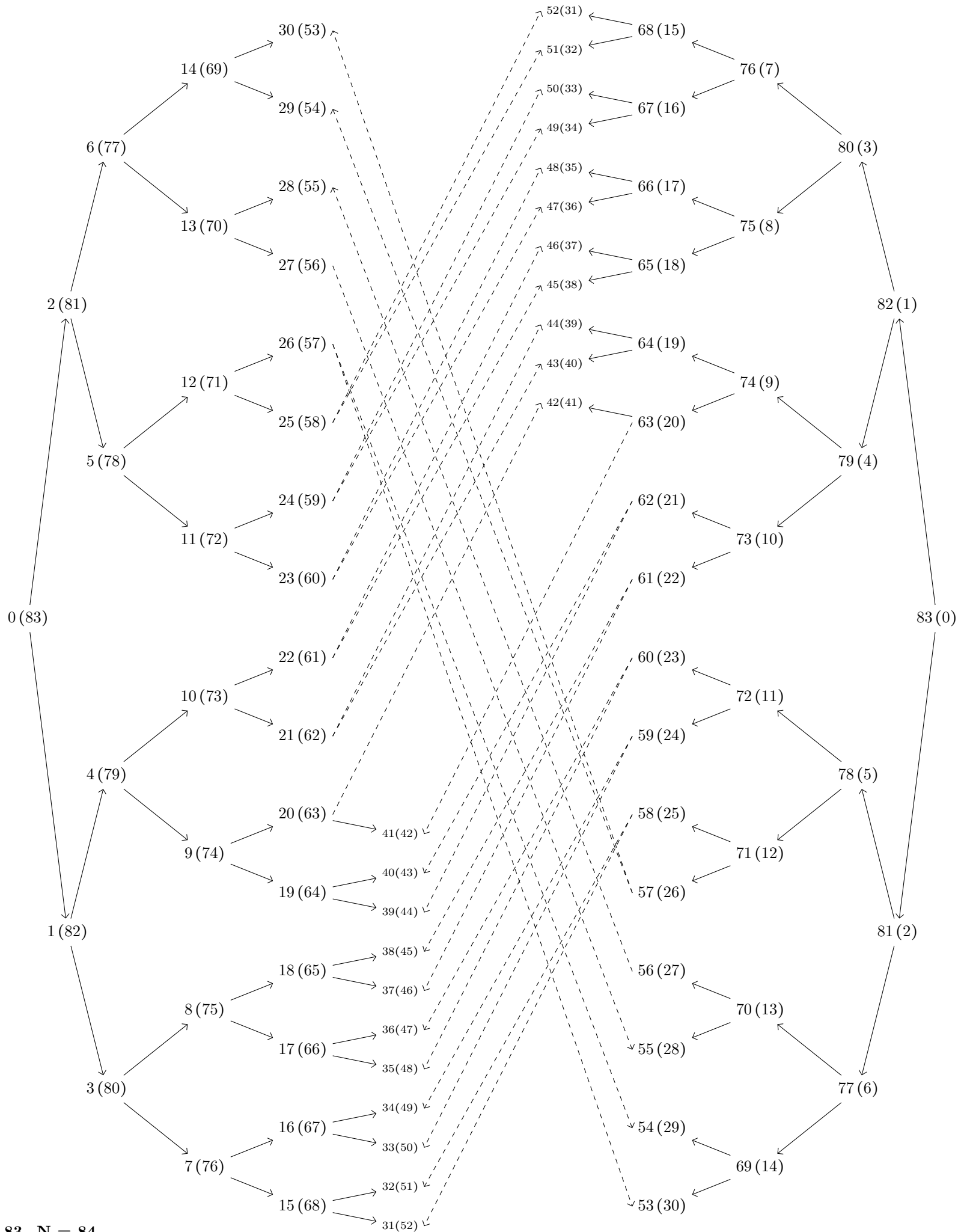


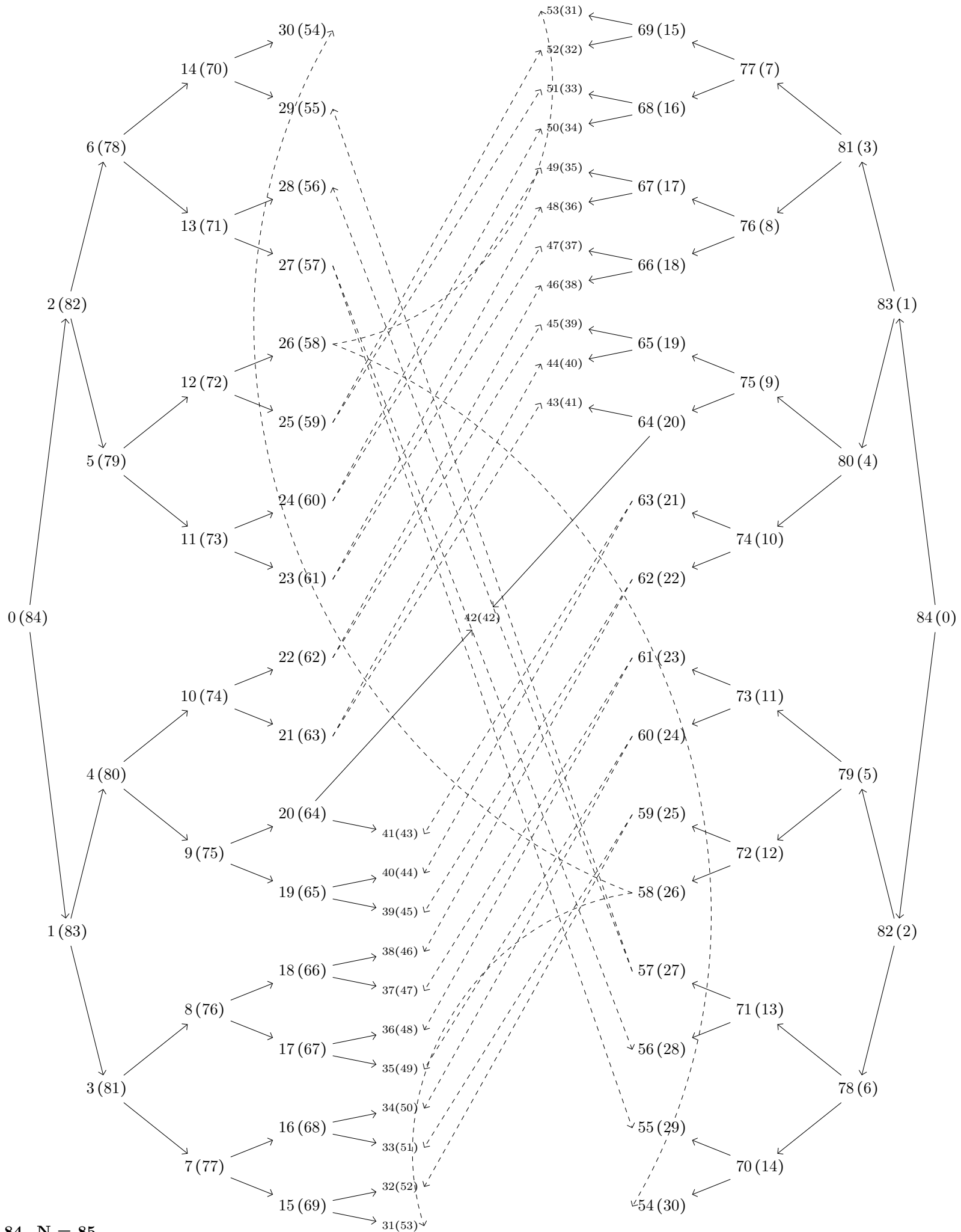


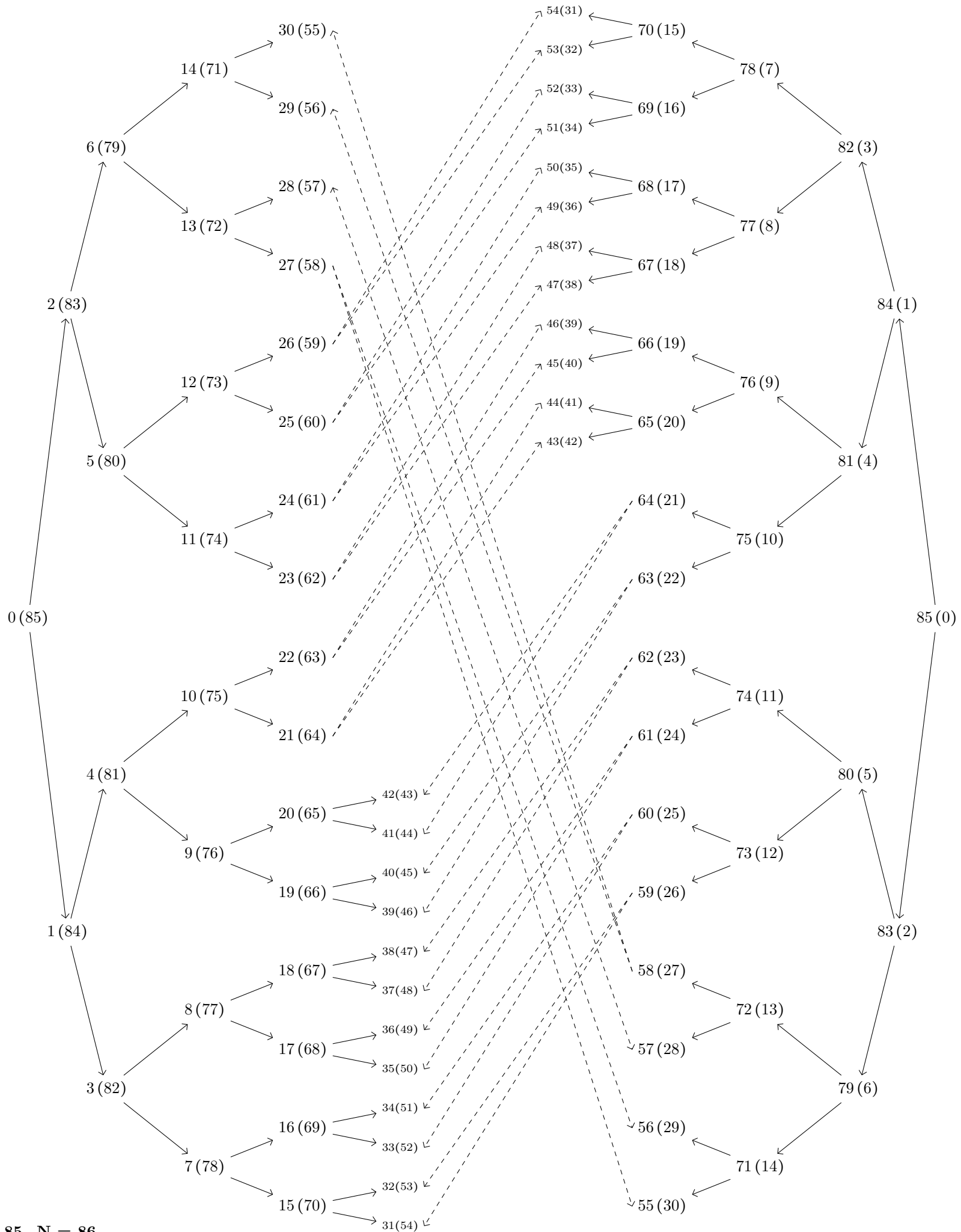


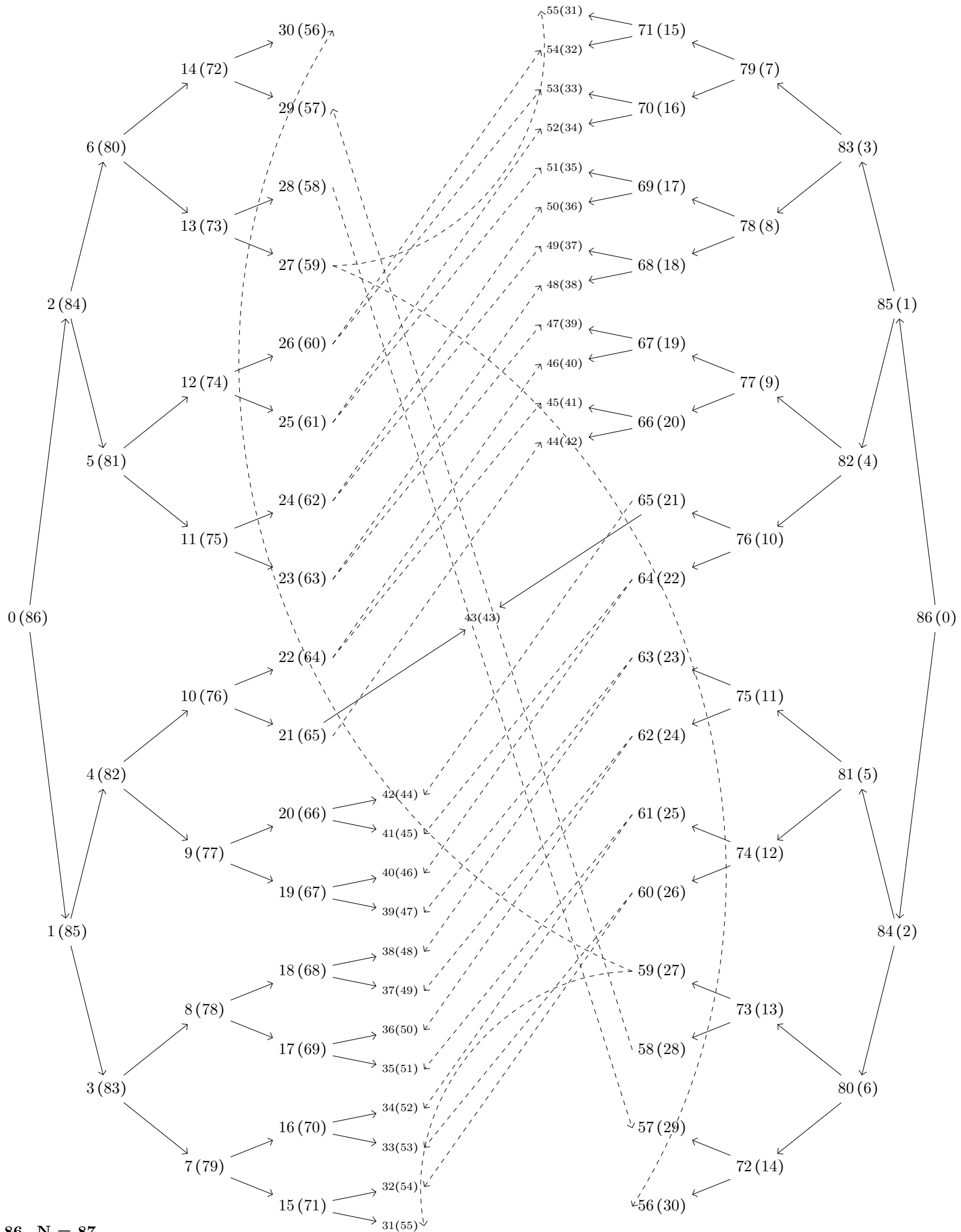


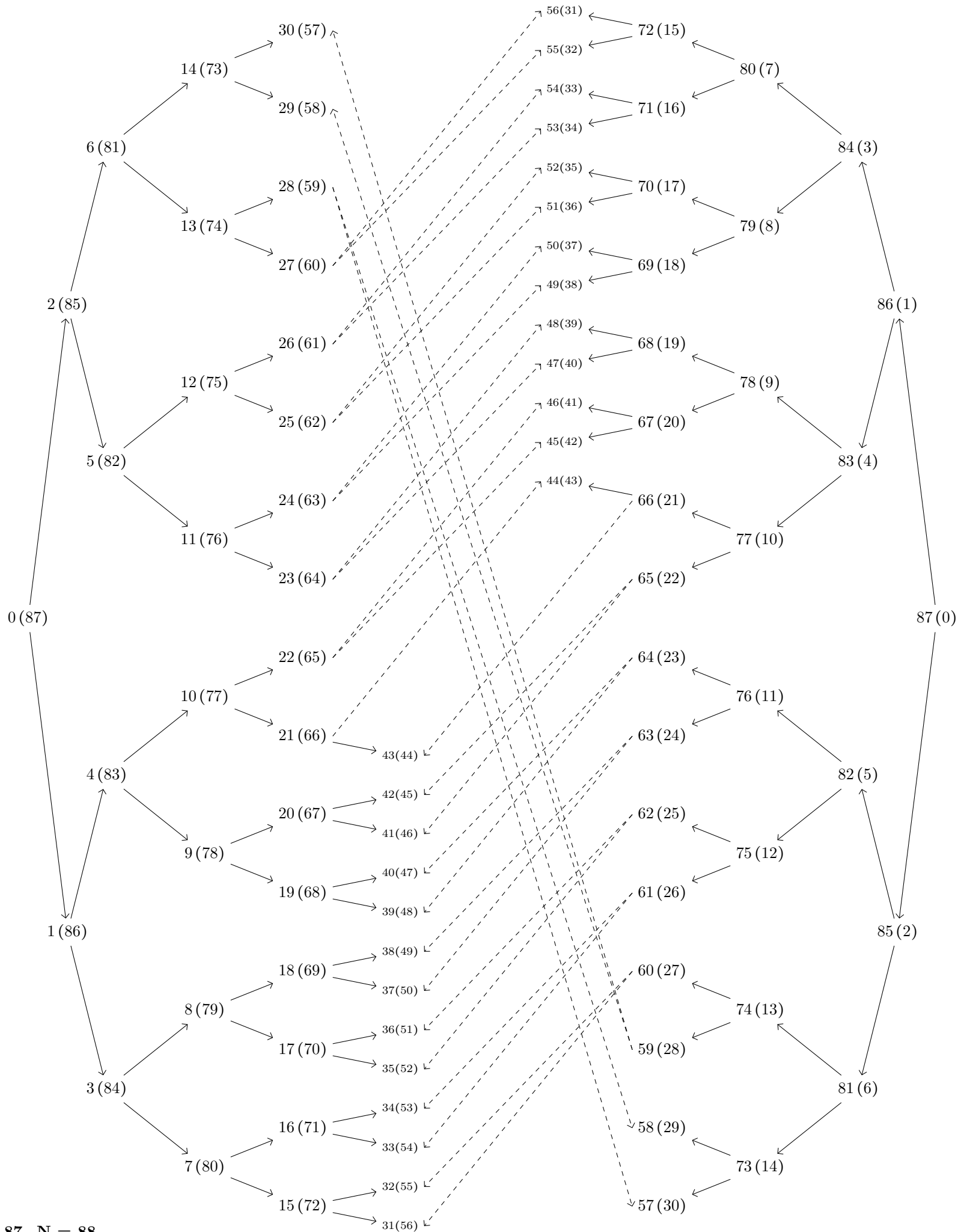


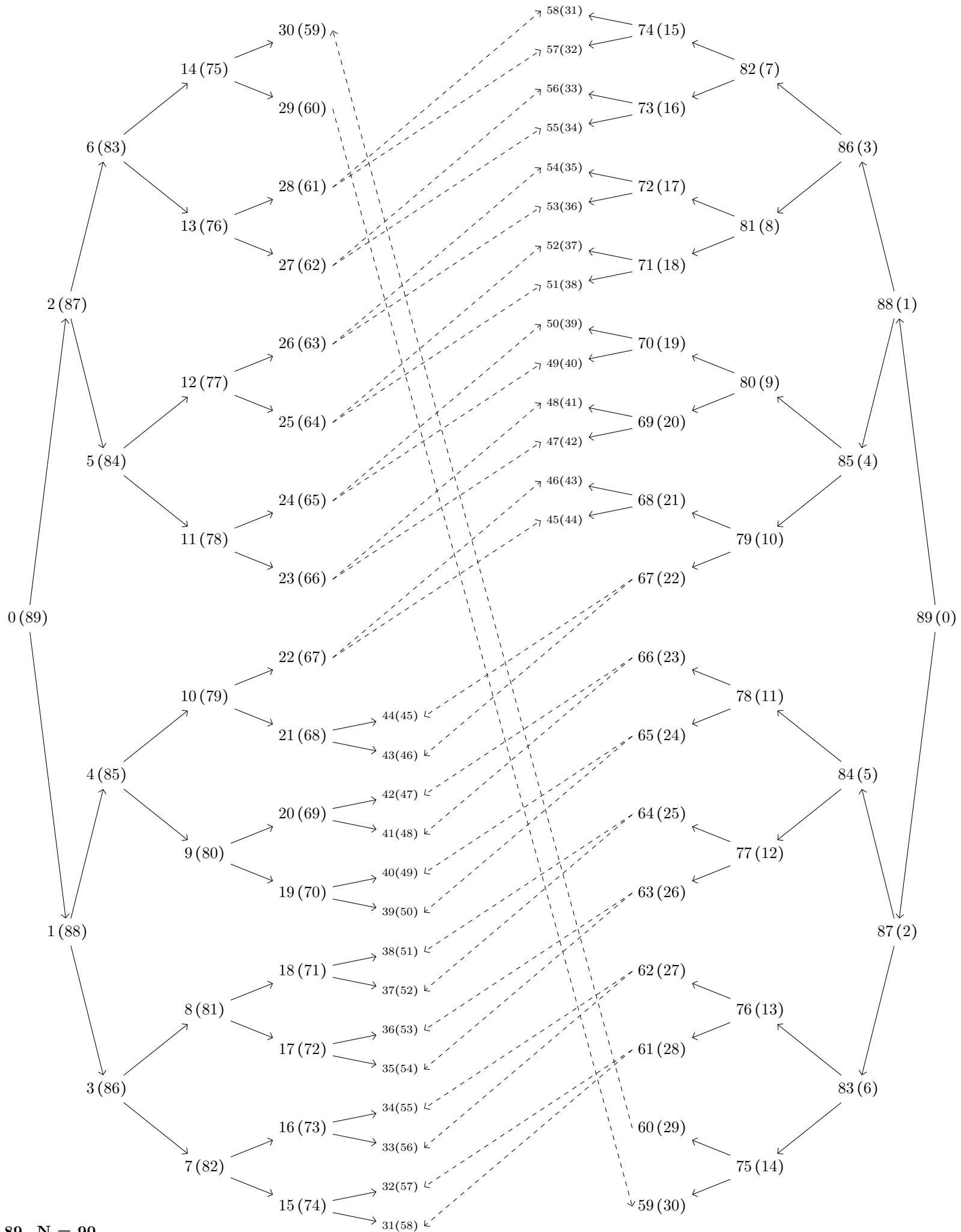


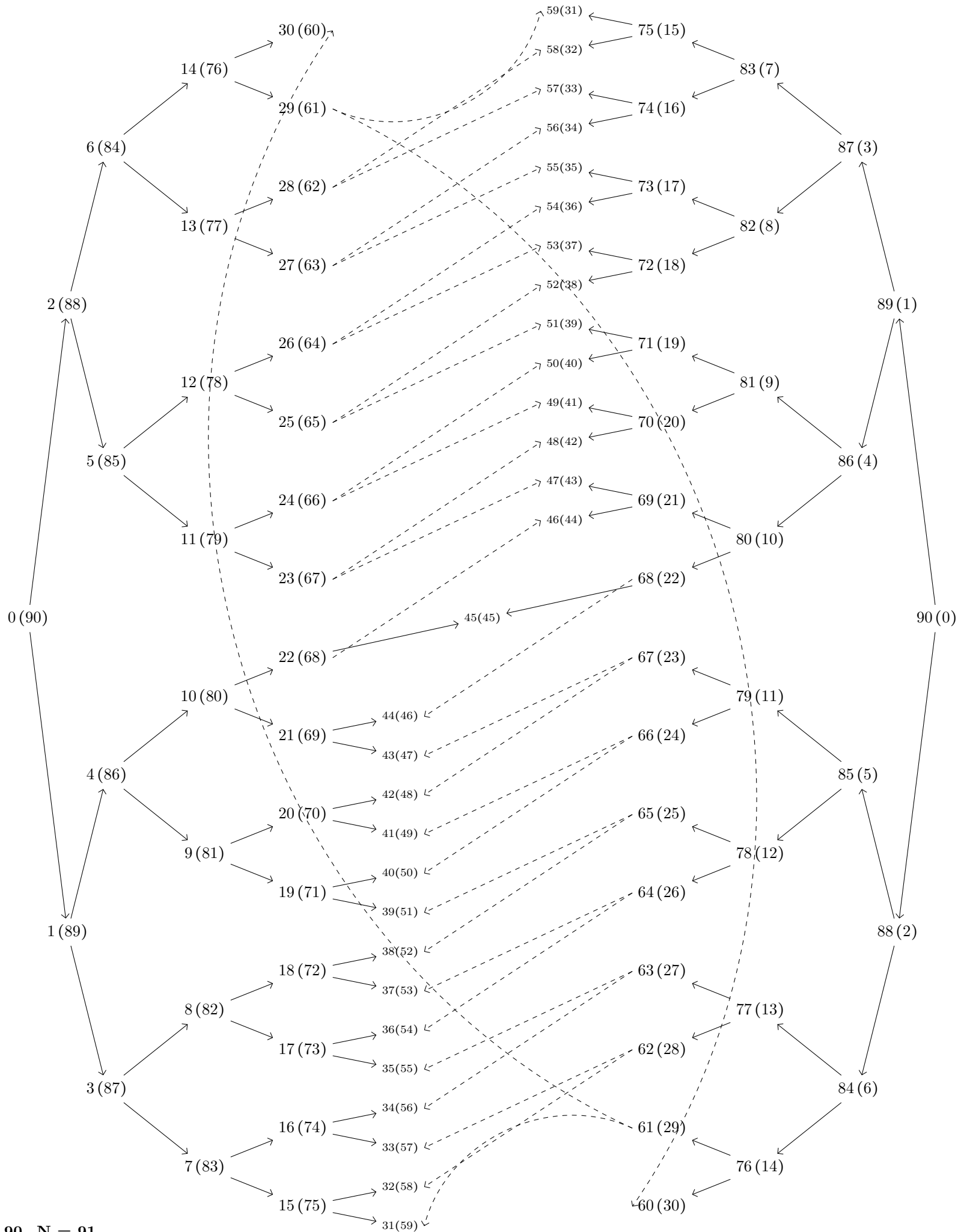


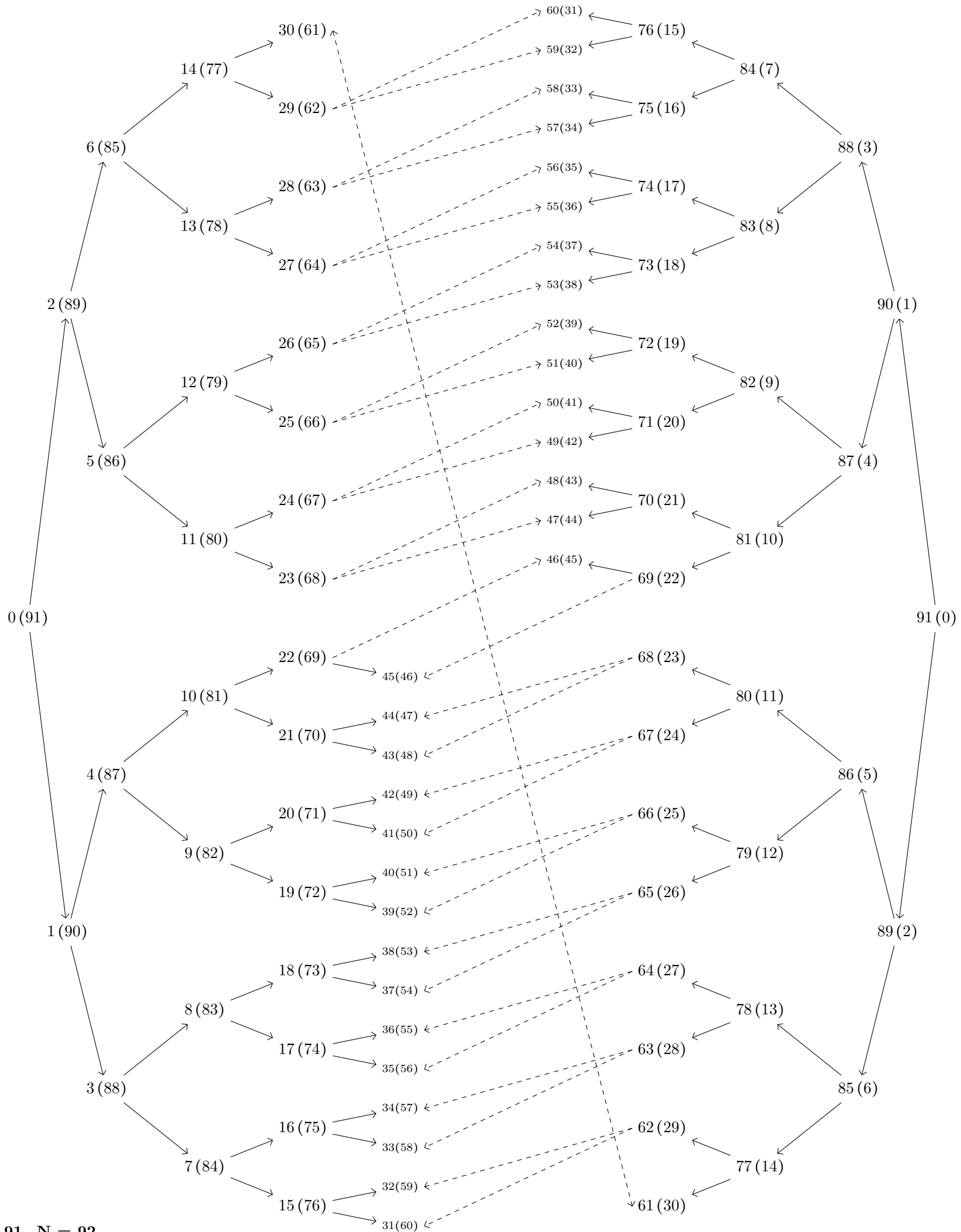


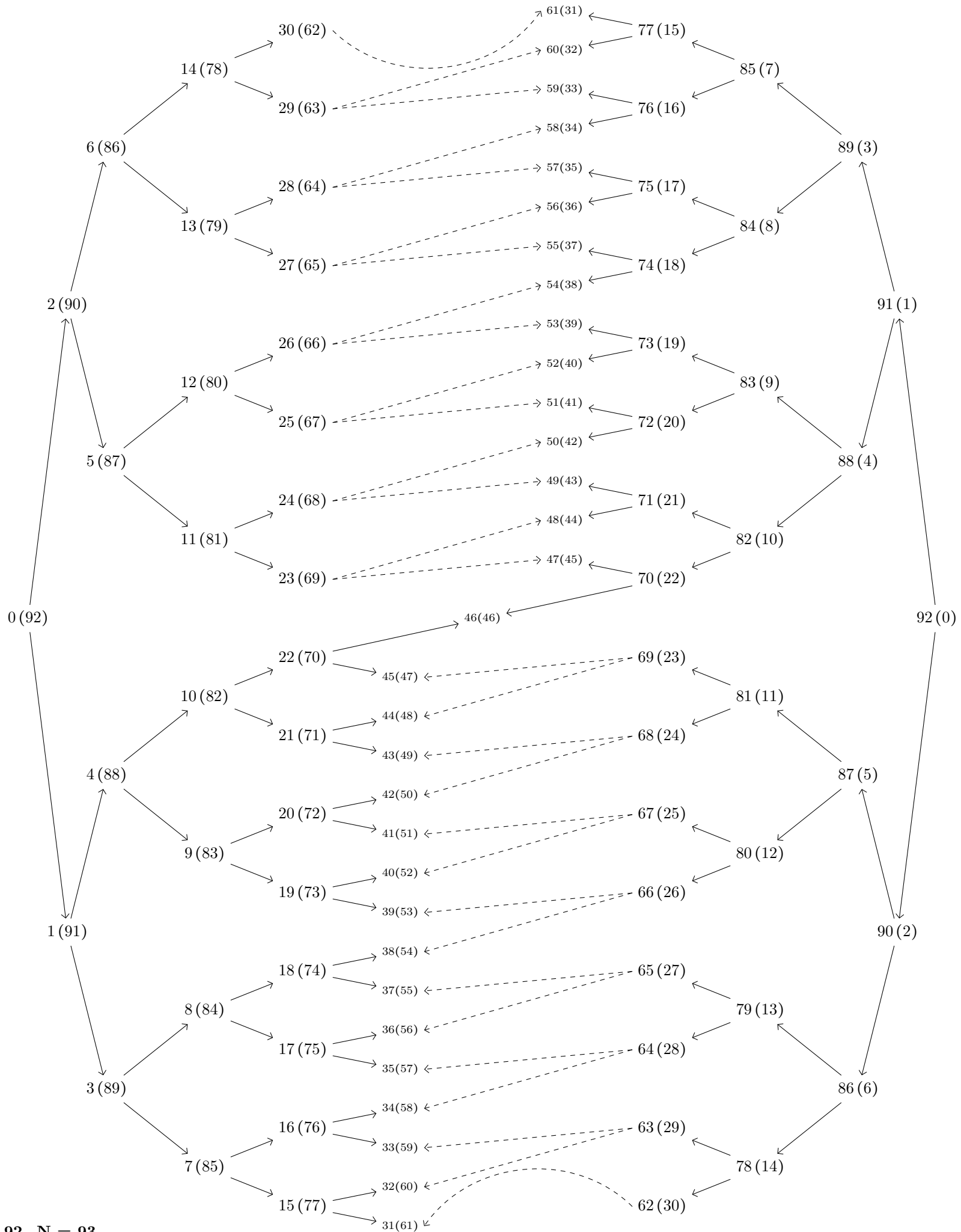


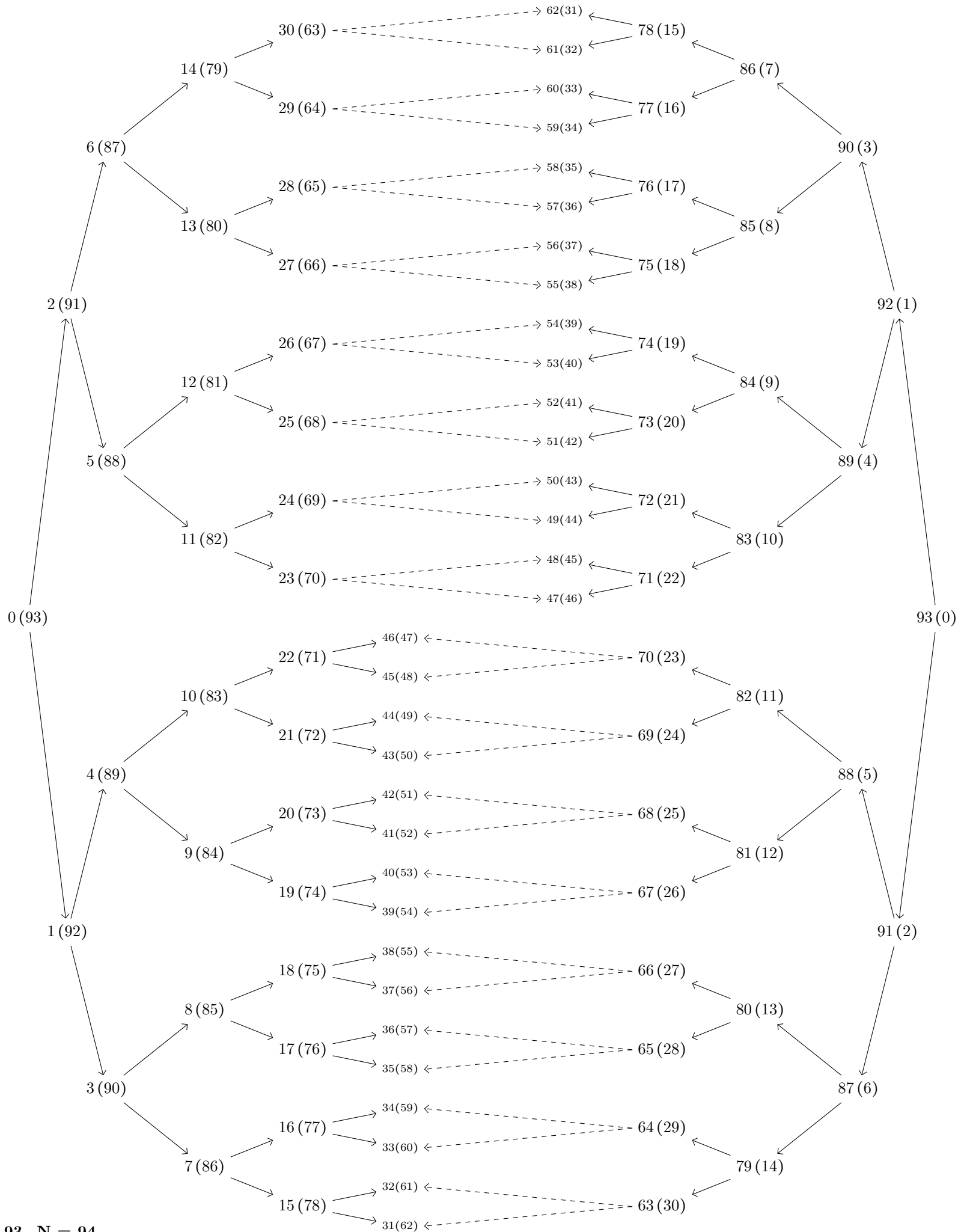


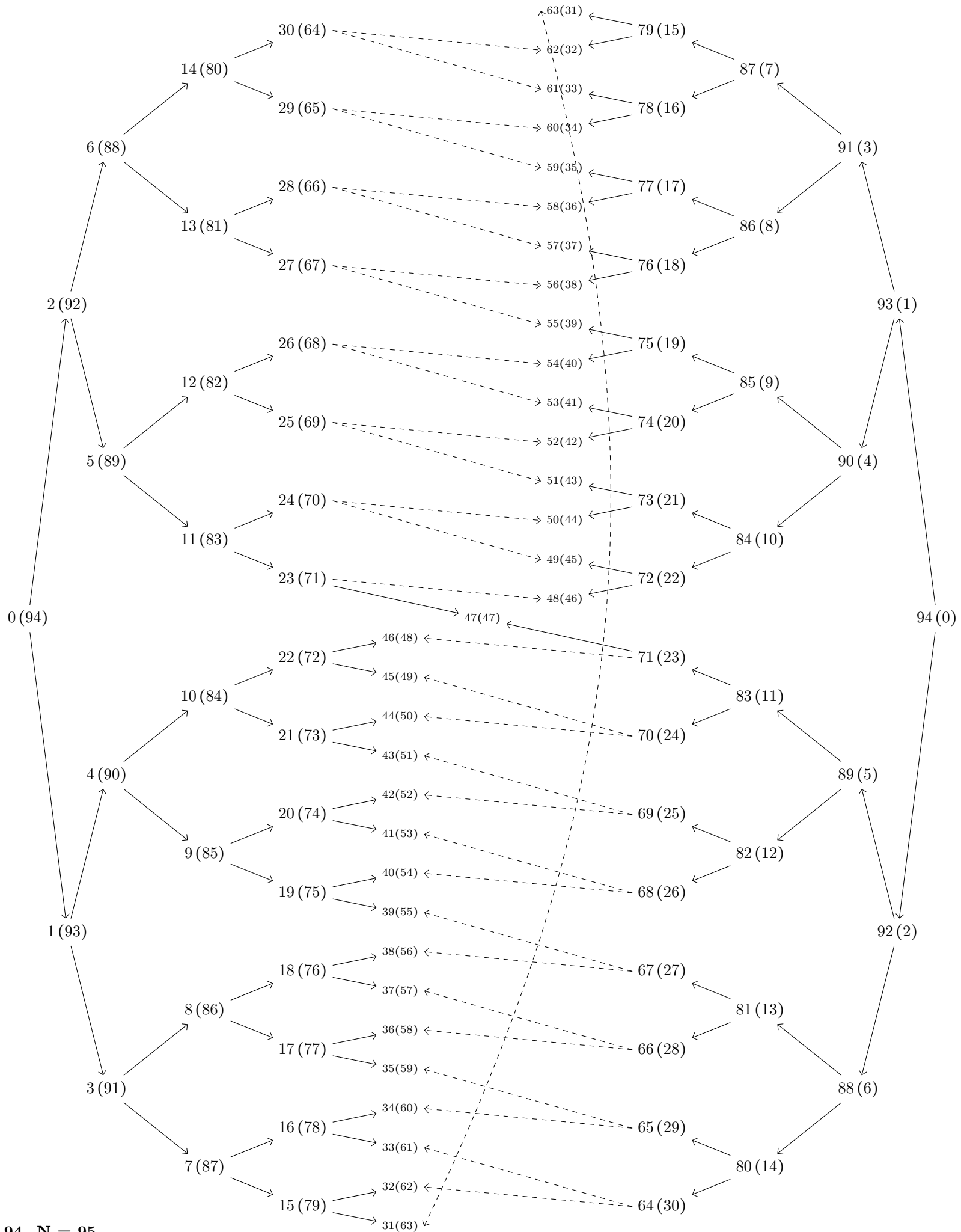


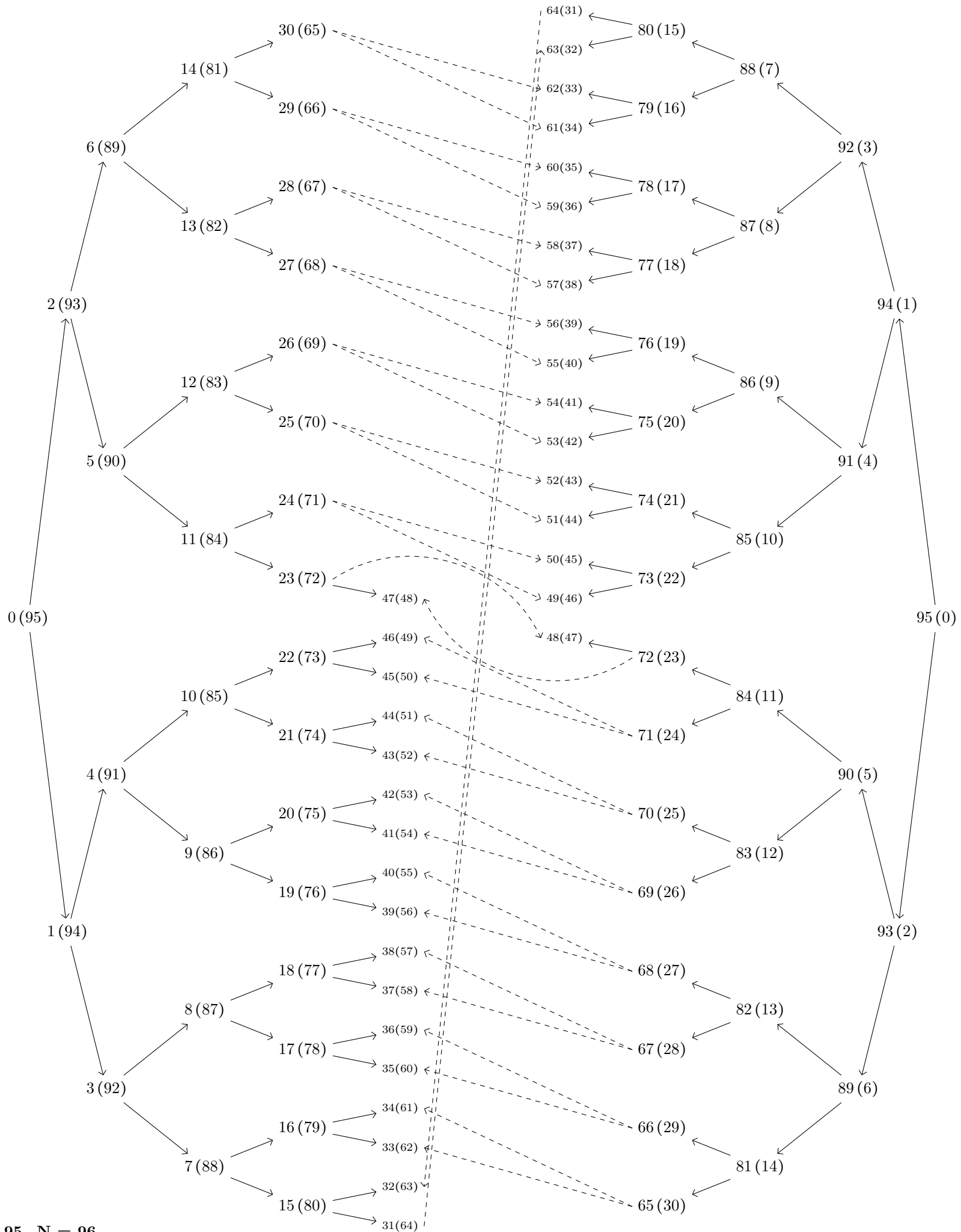


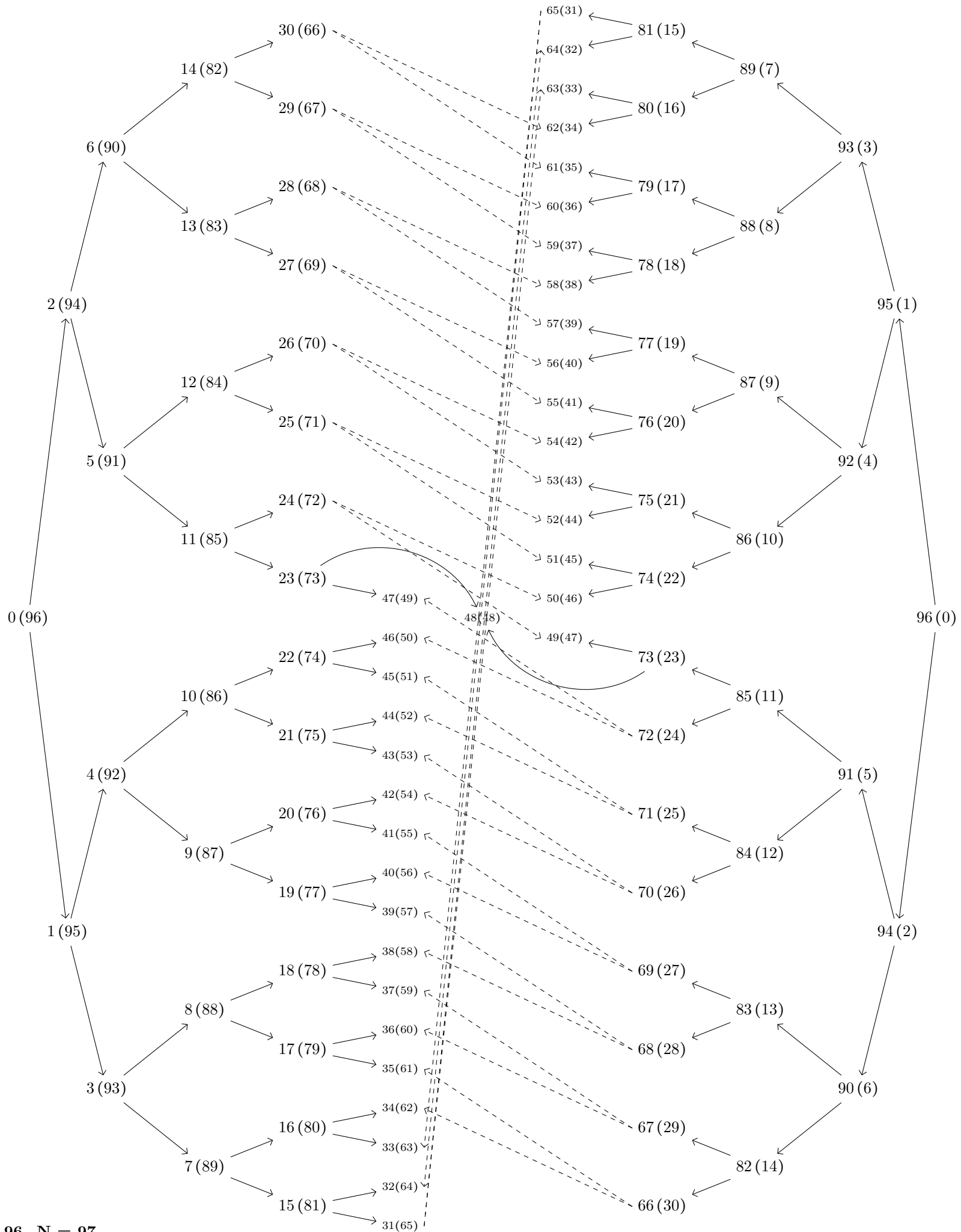


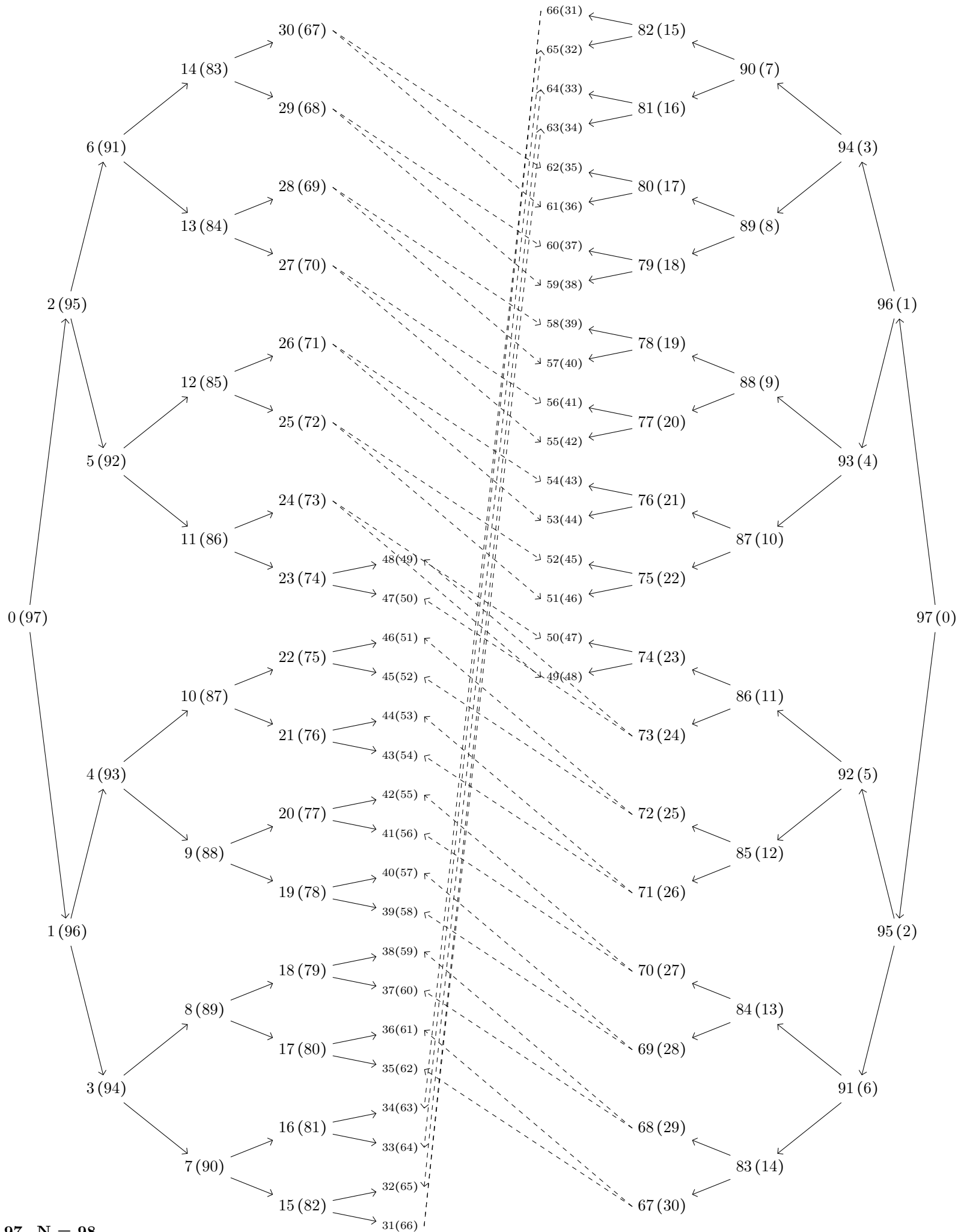


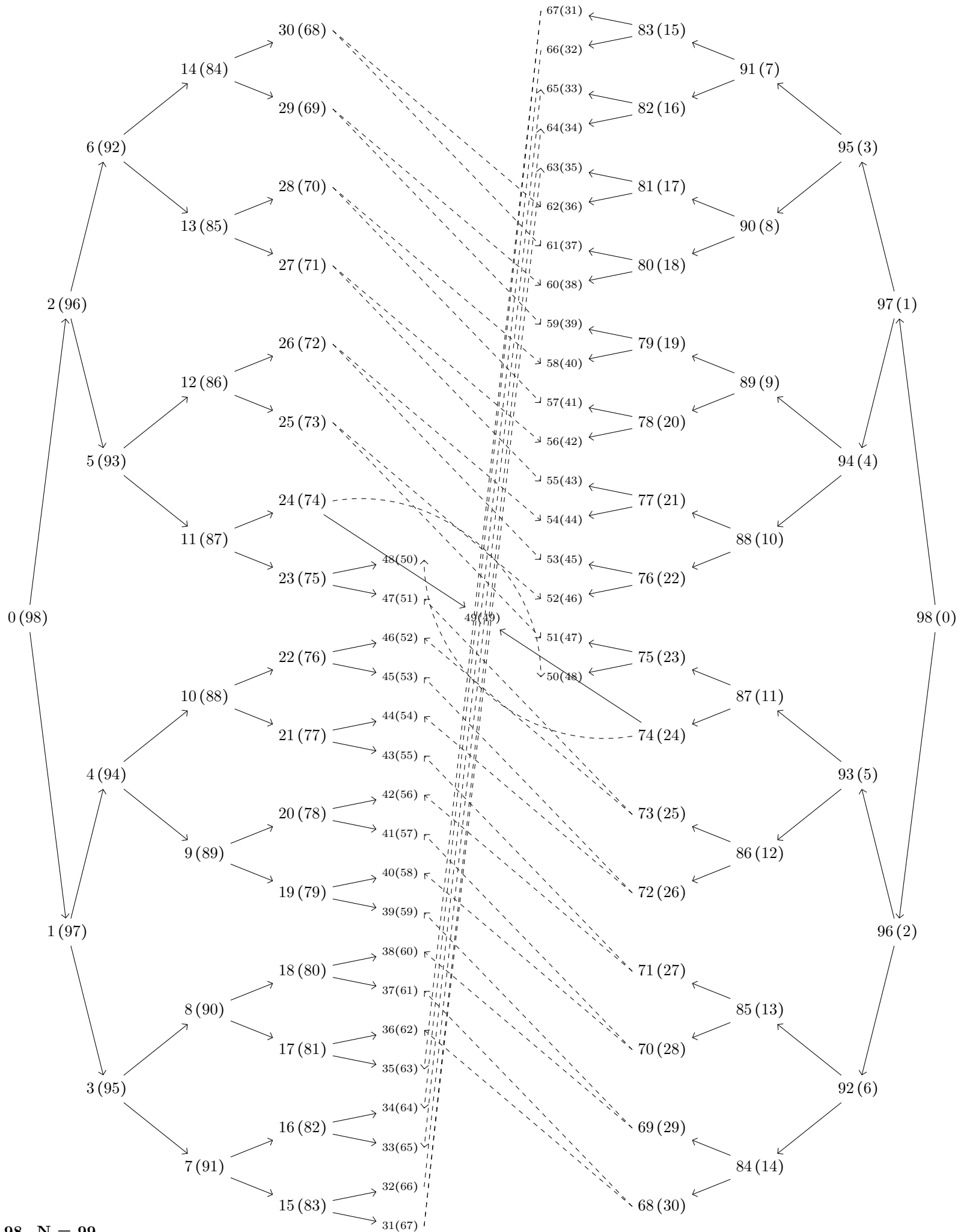


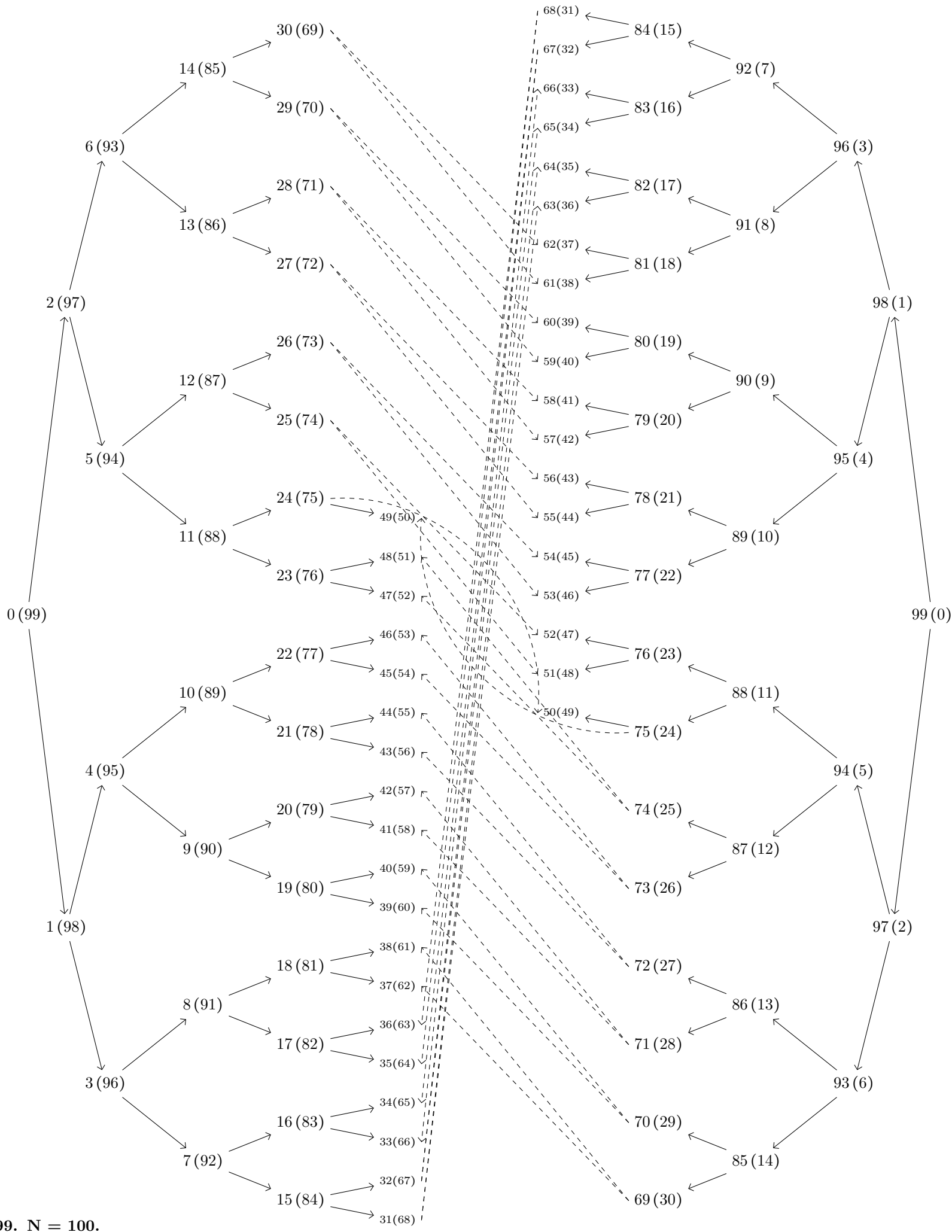




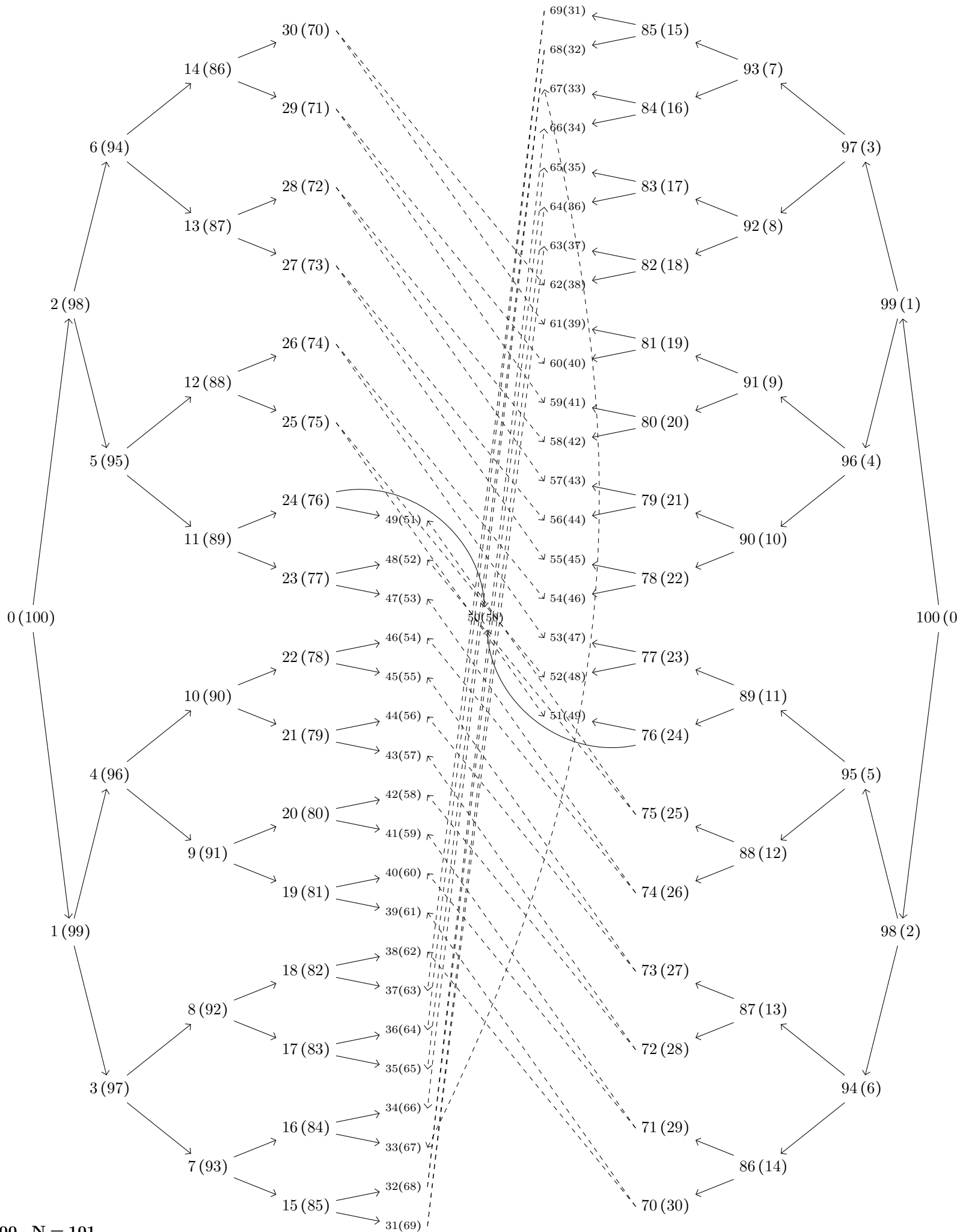


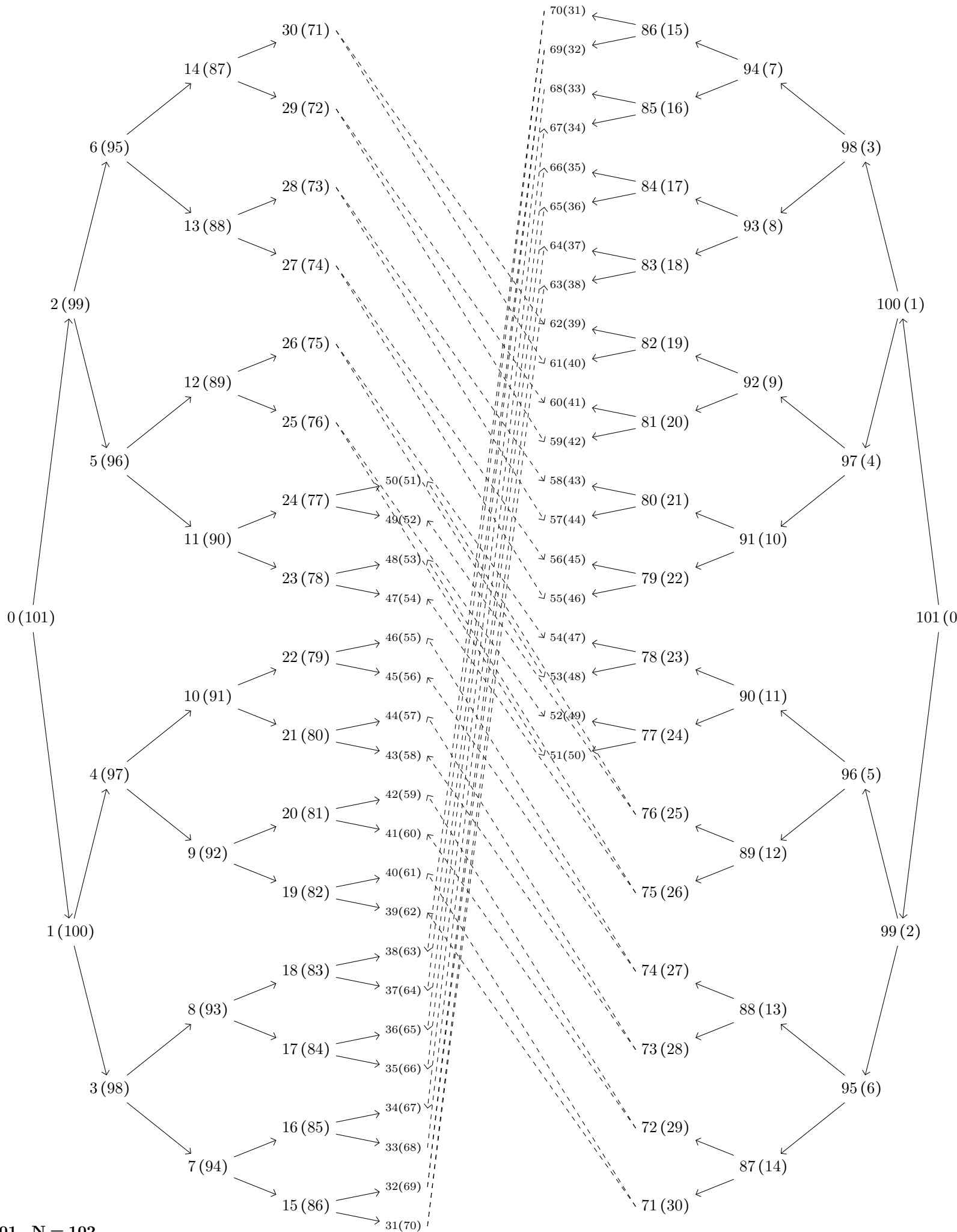


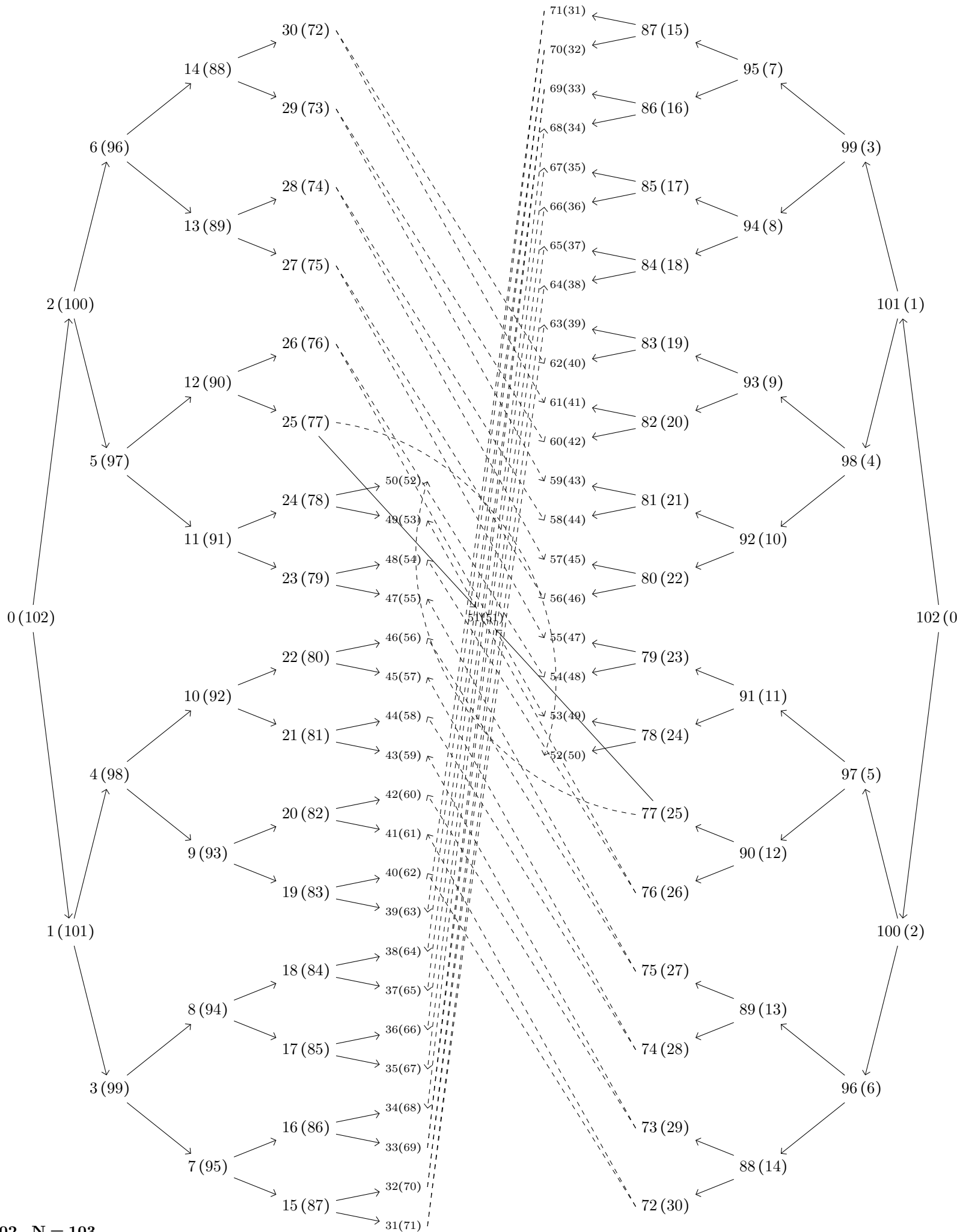


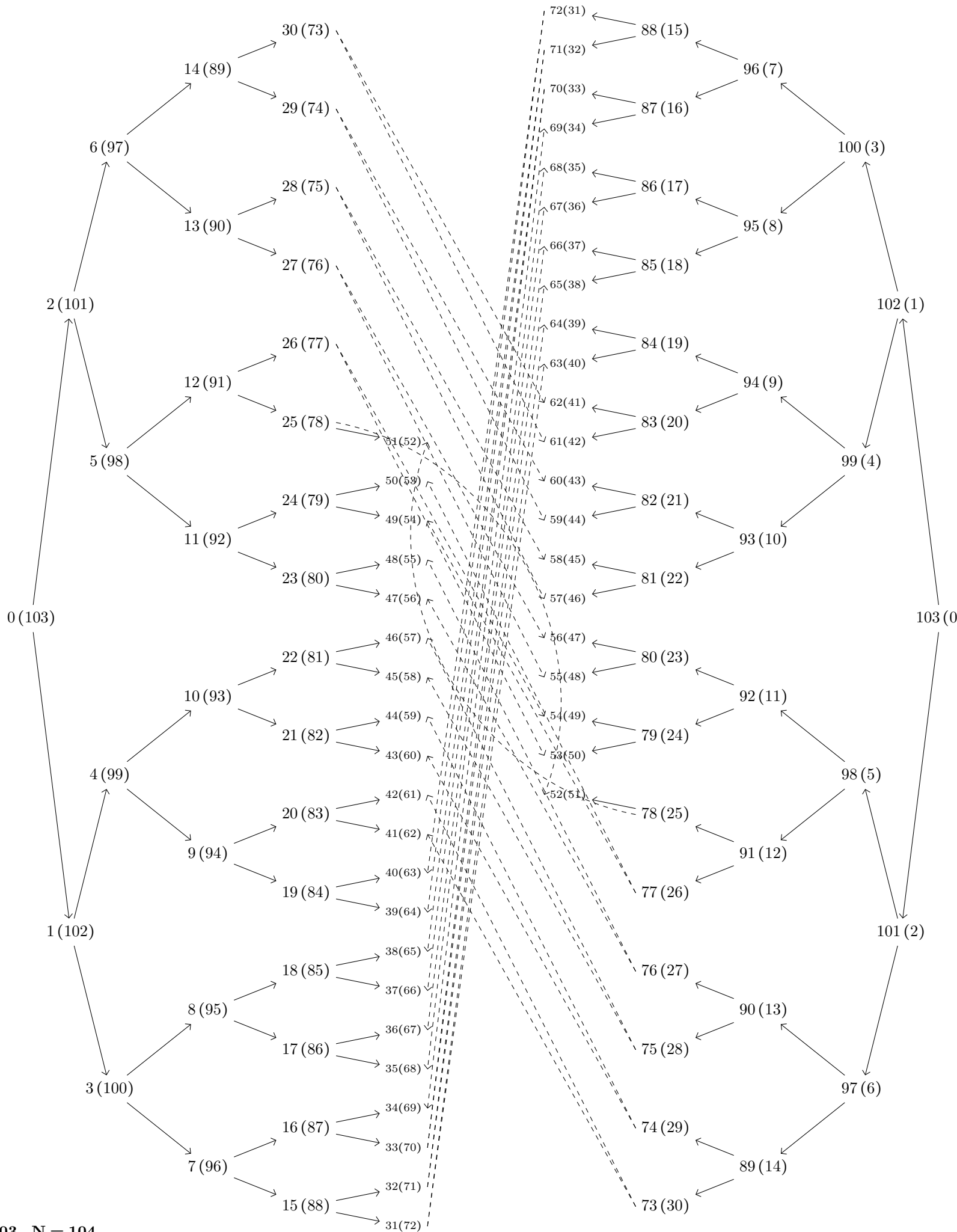


99. N = 100.

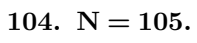


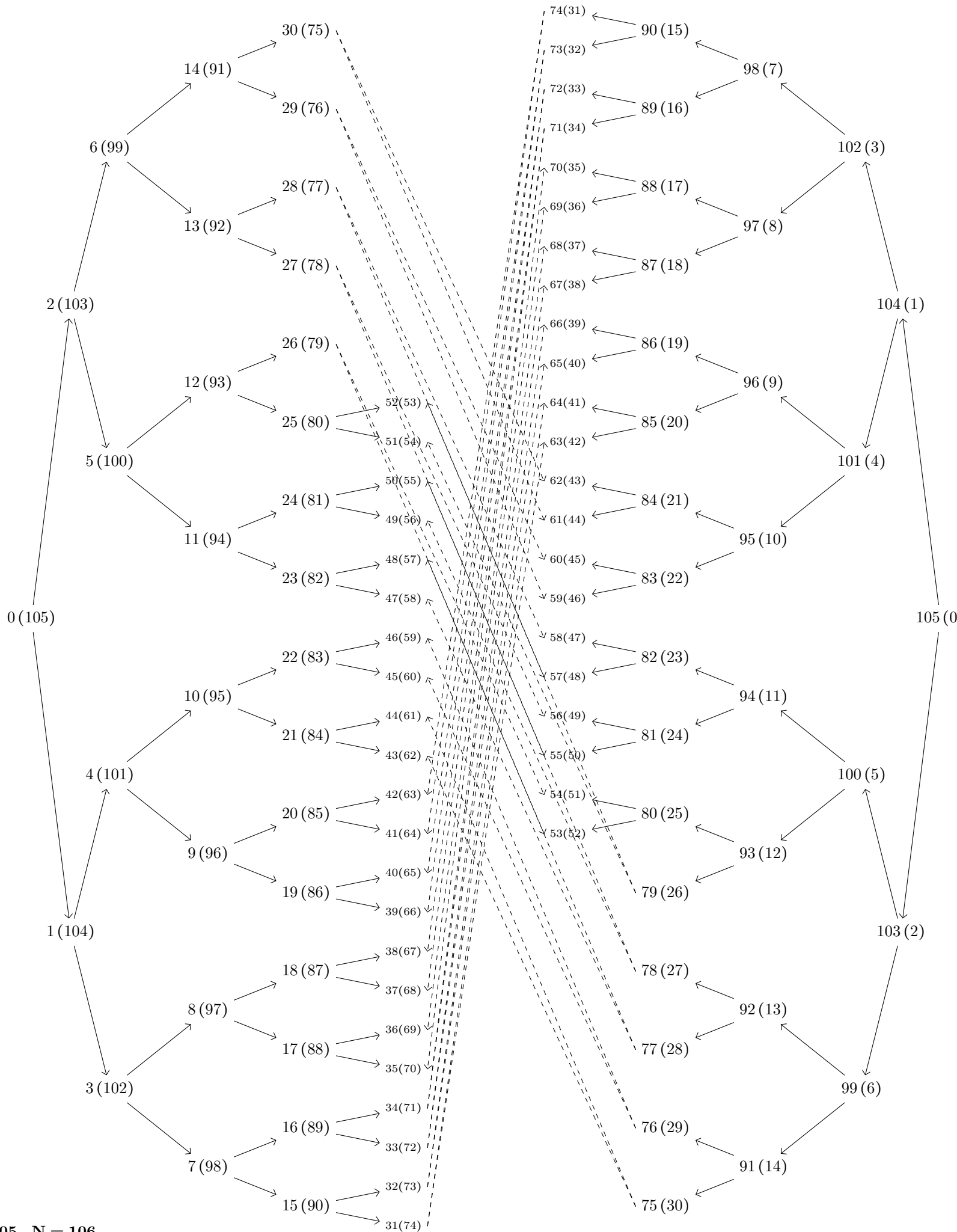


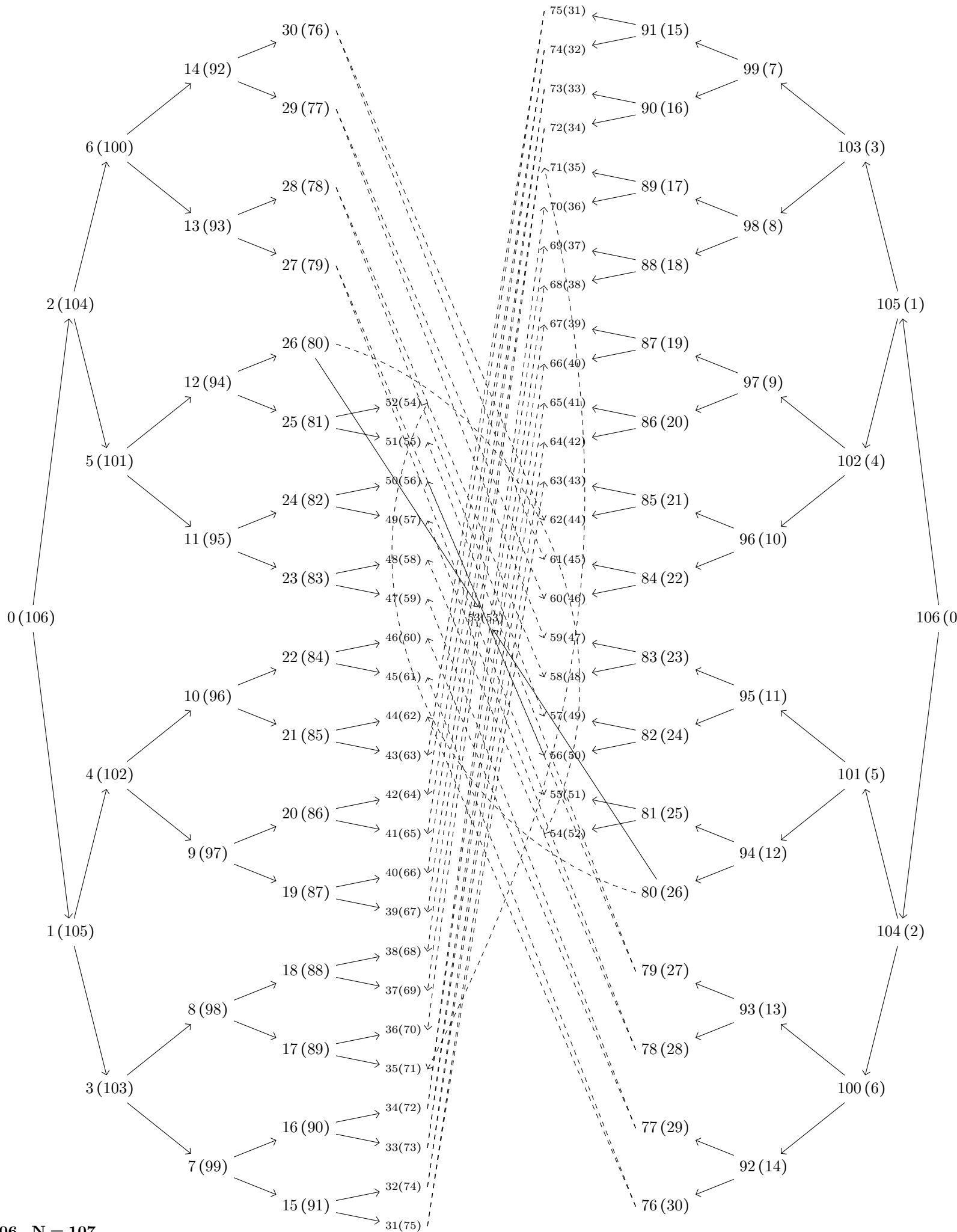




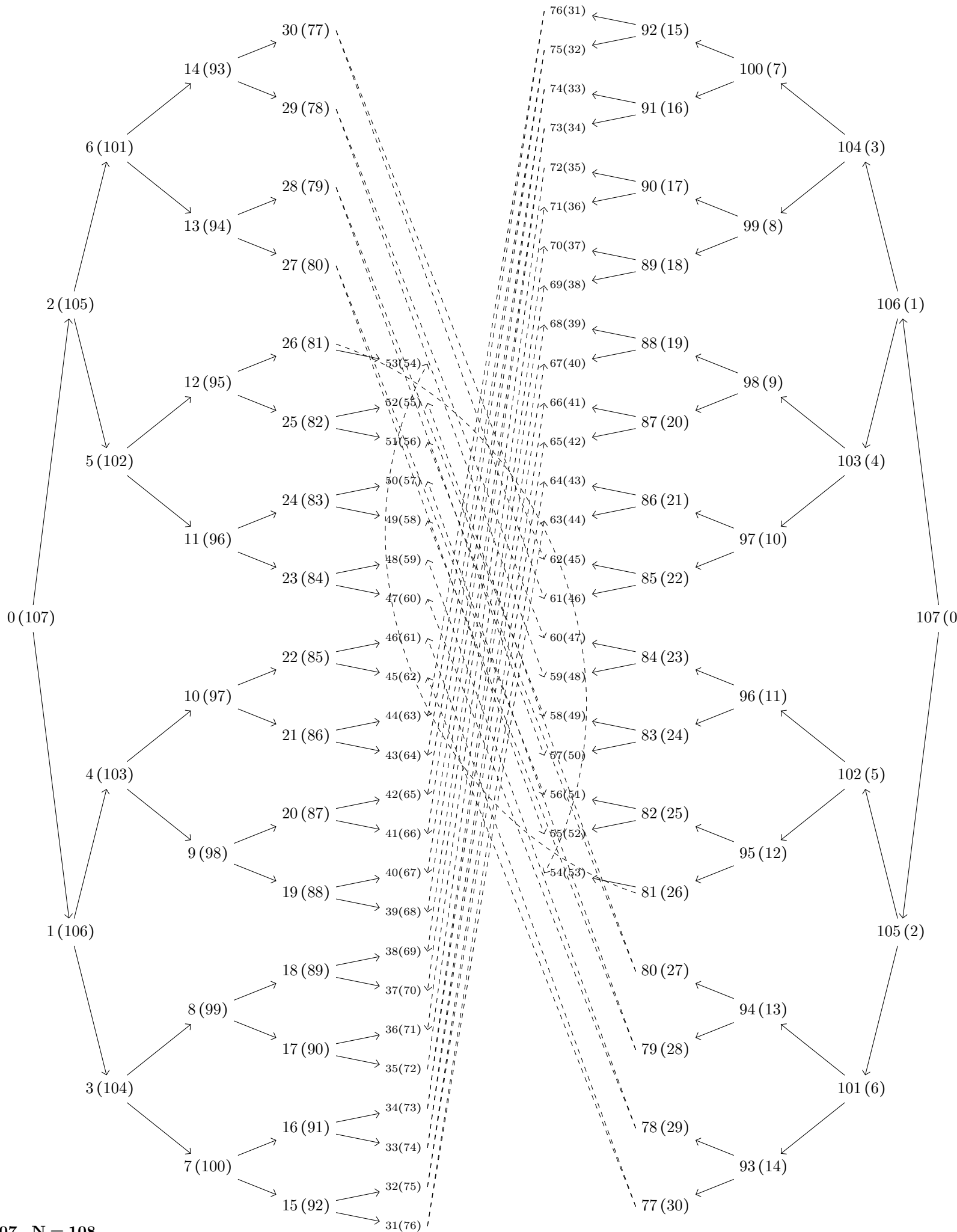
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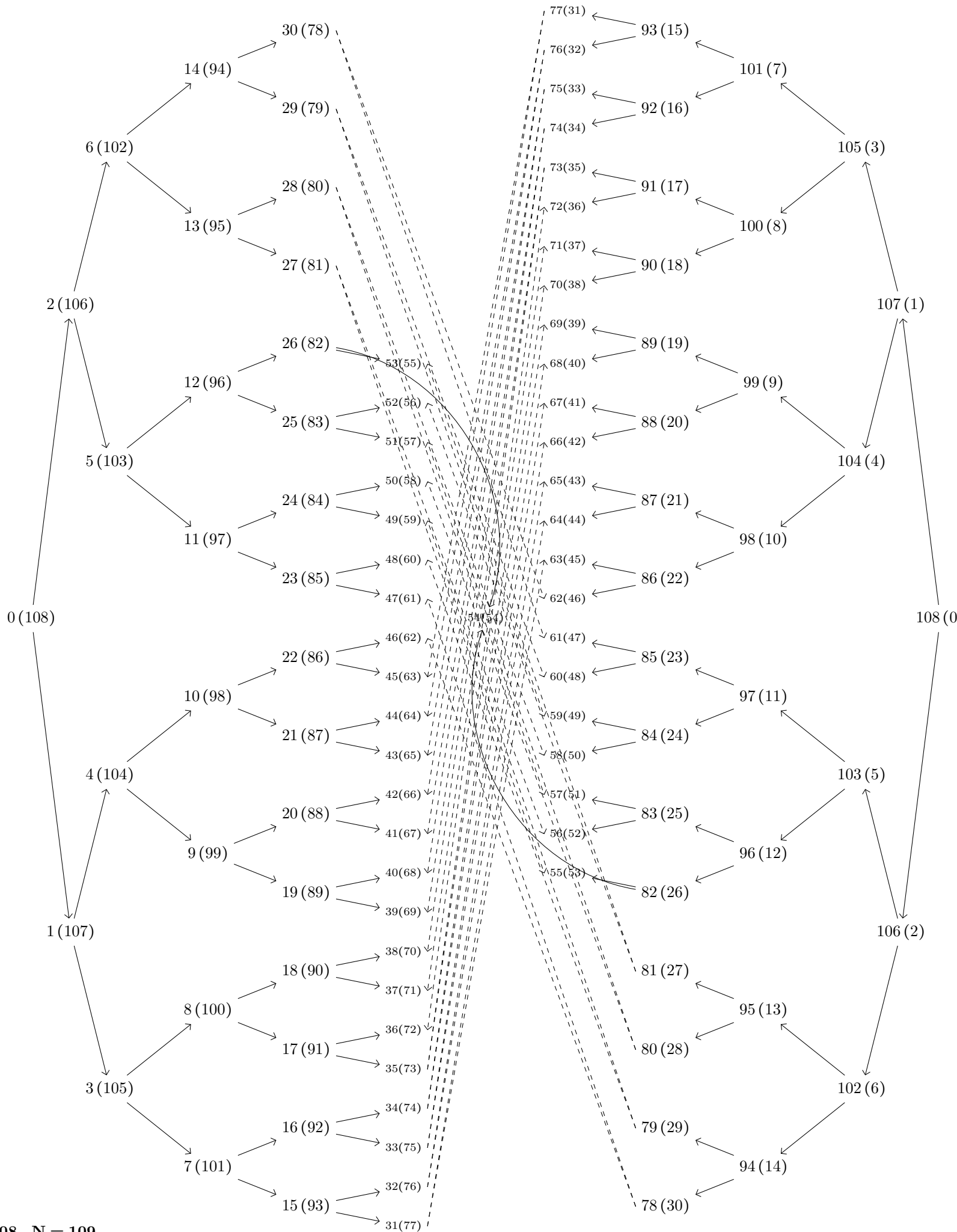




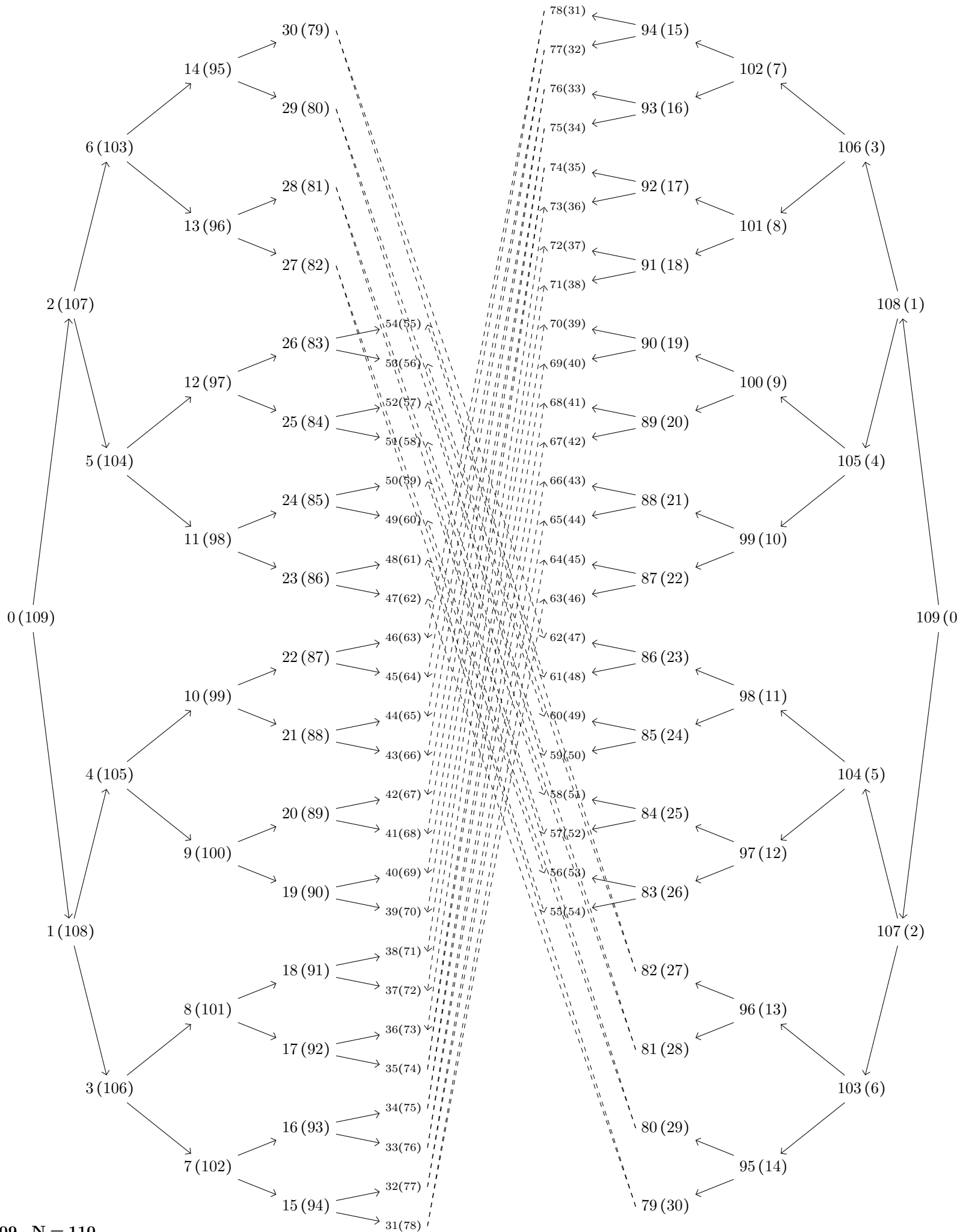
106. N = 107.



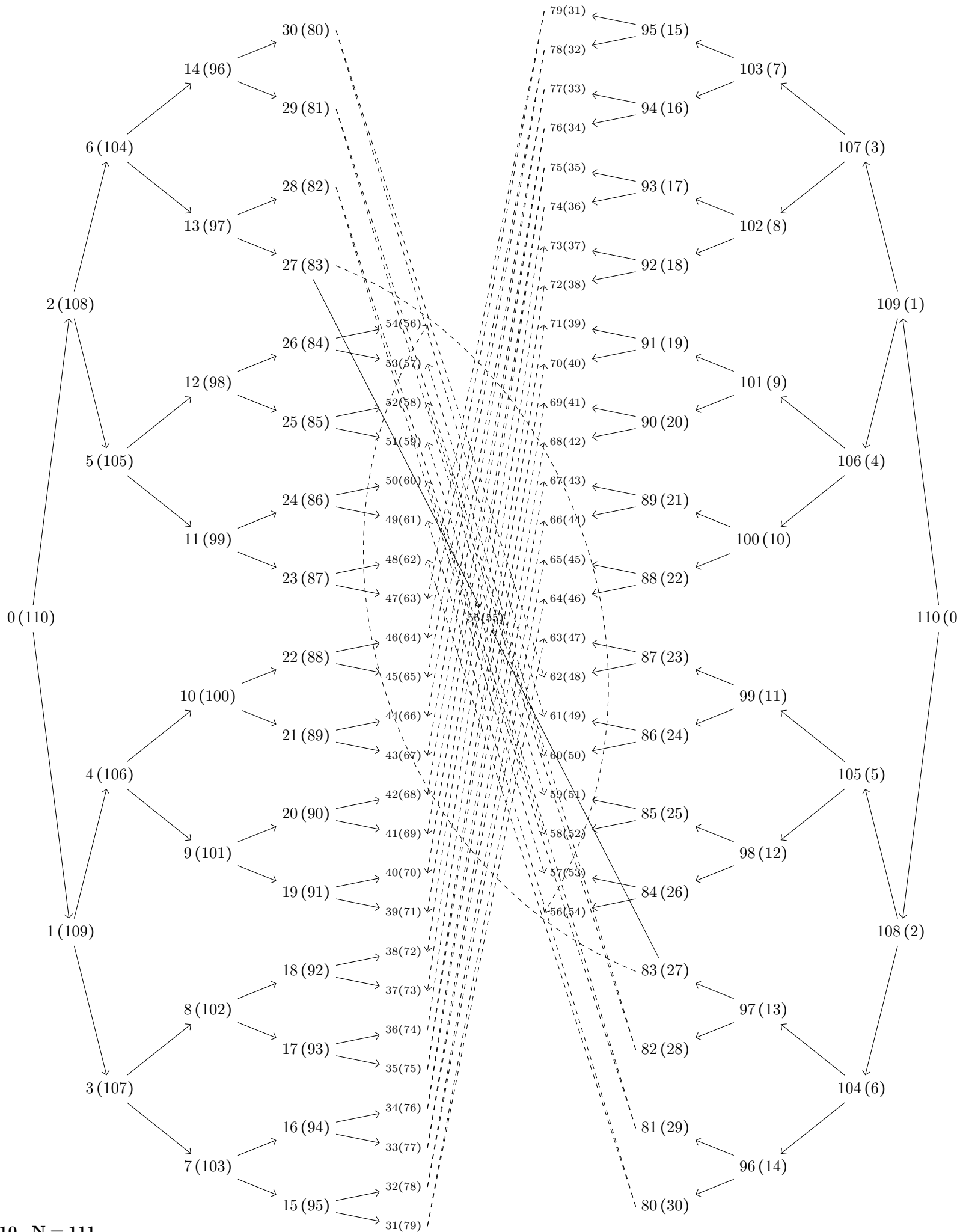
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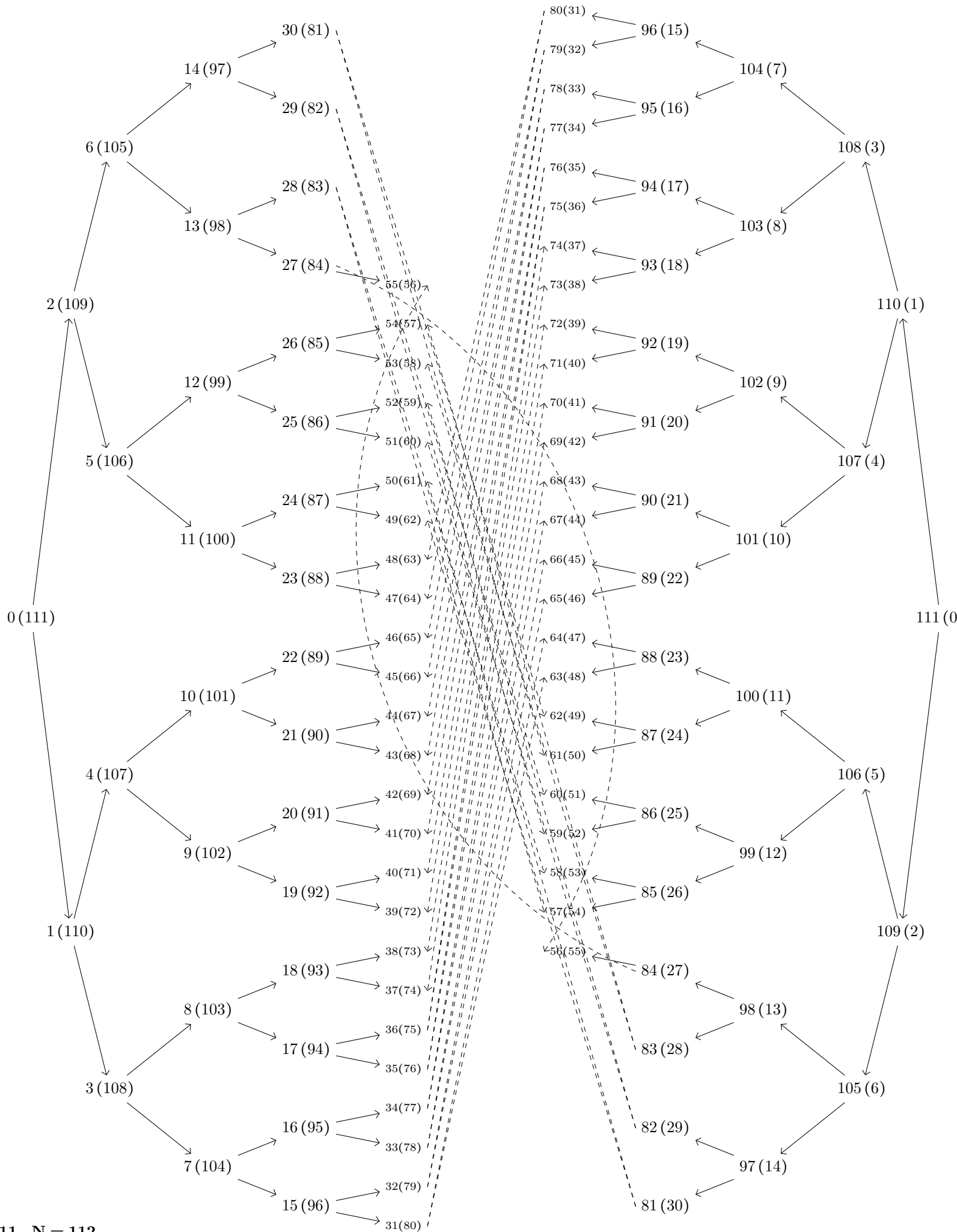


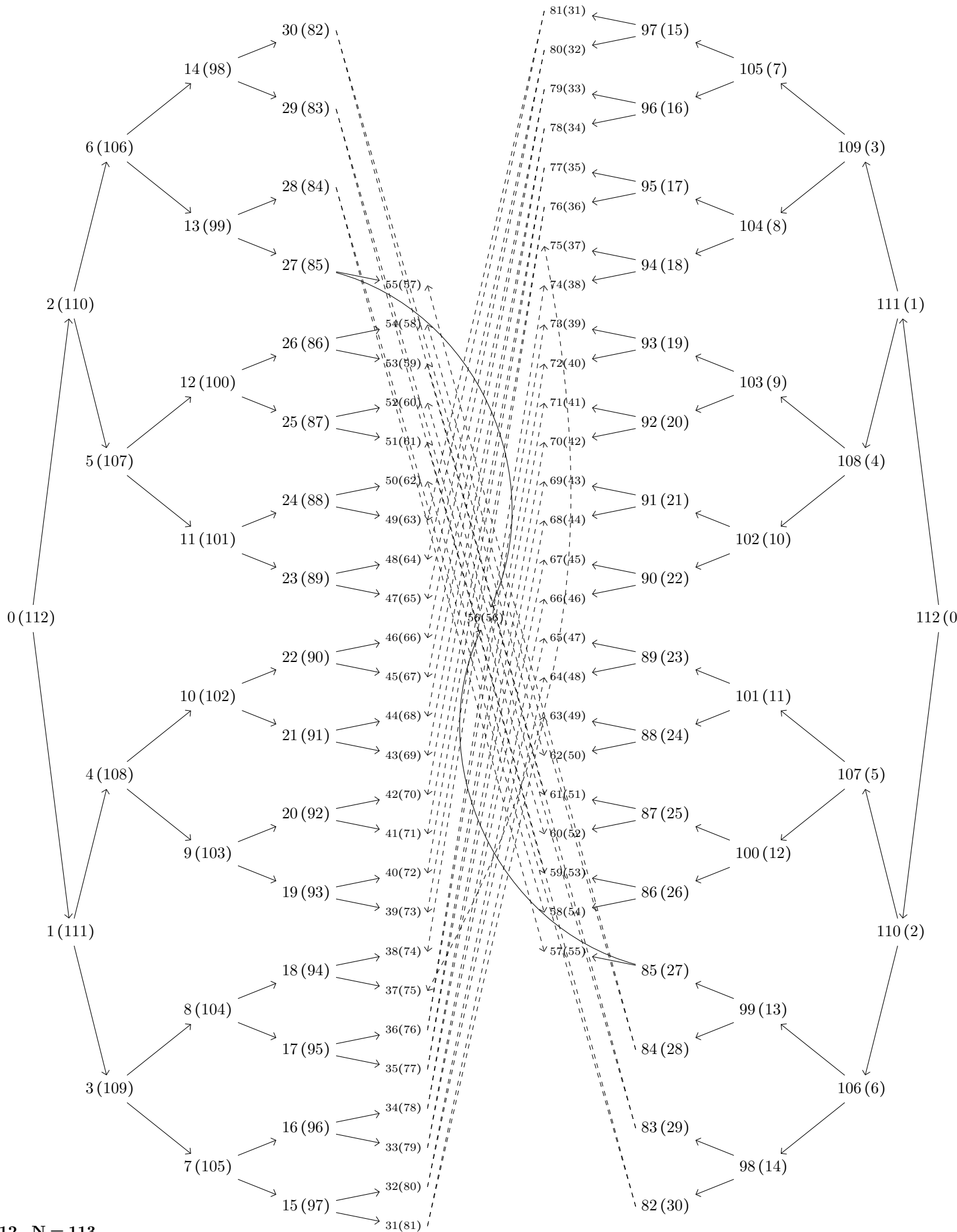
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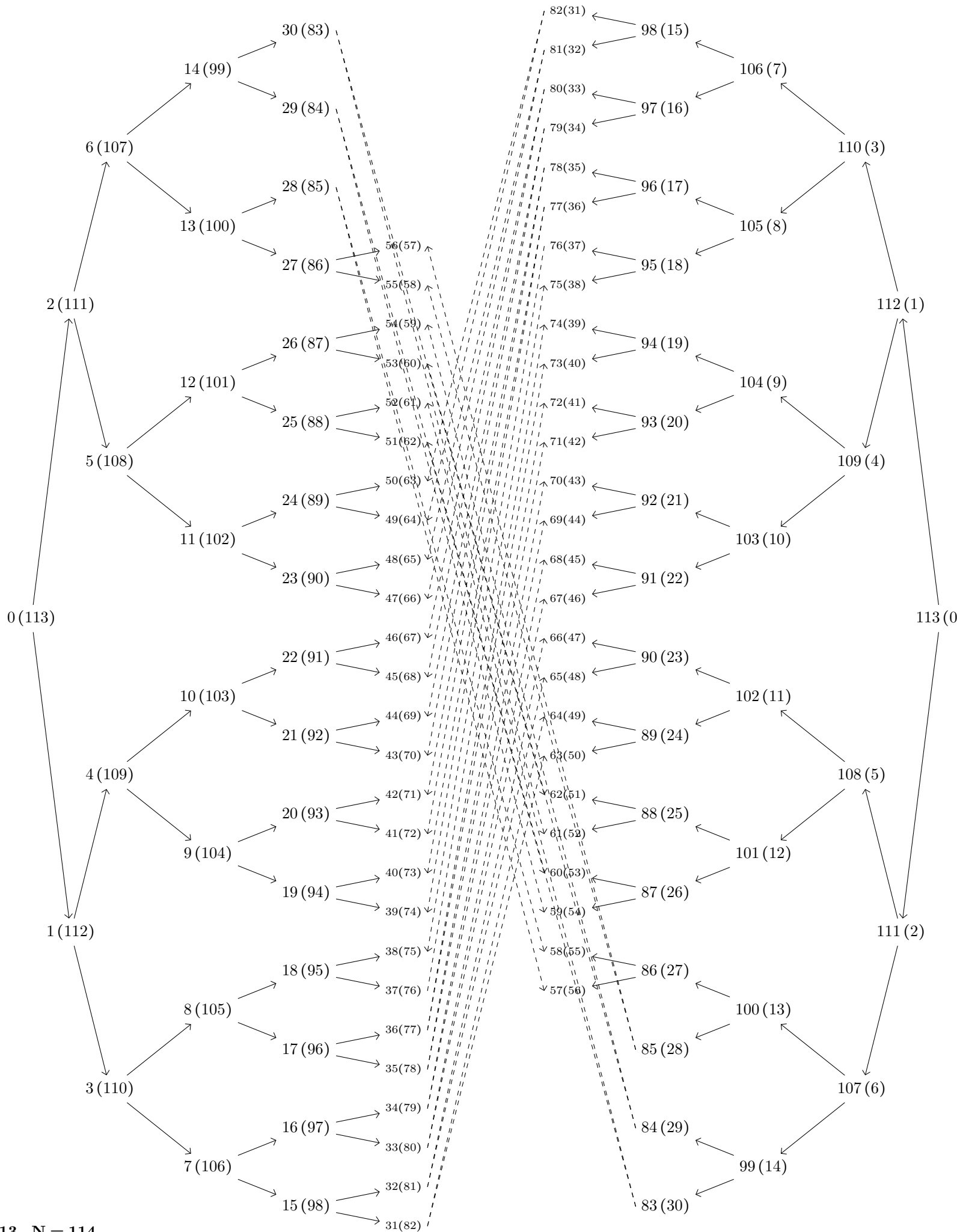
109. N = 110.



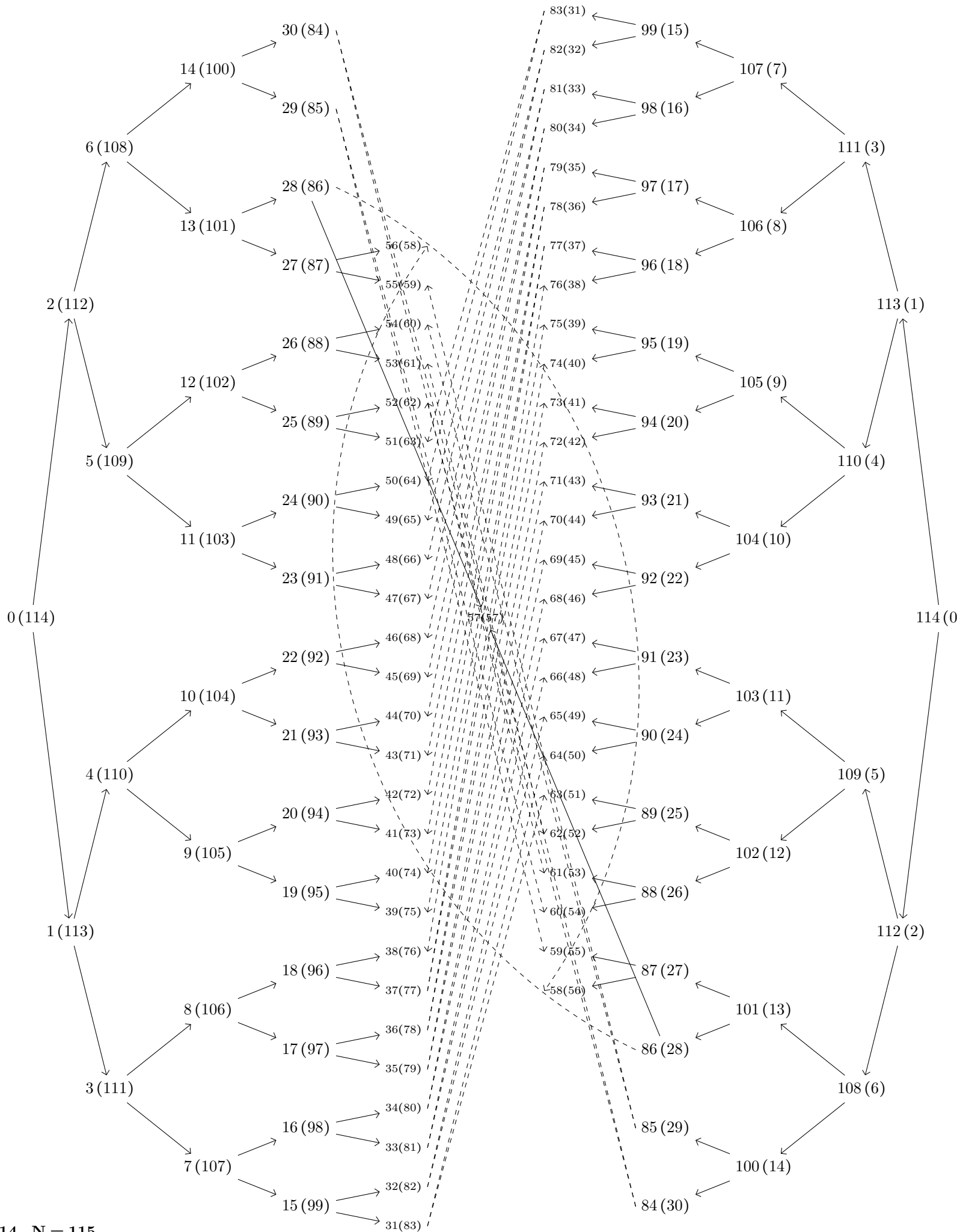




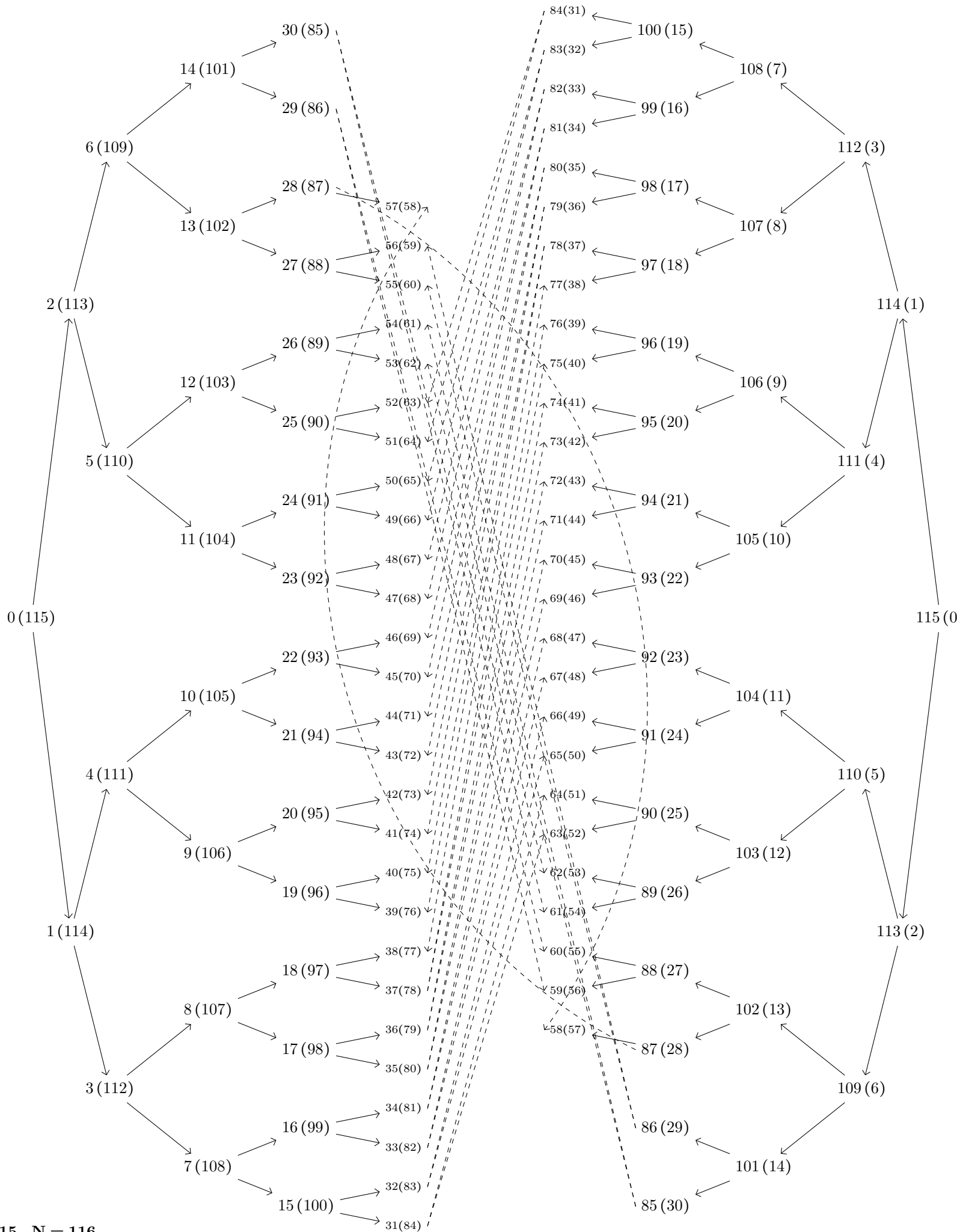
112. N = 113.

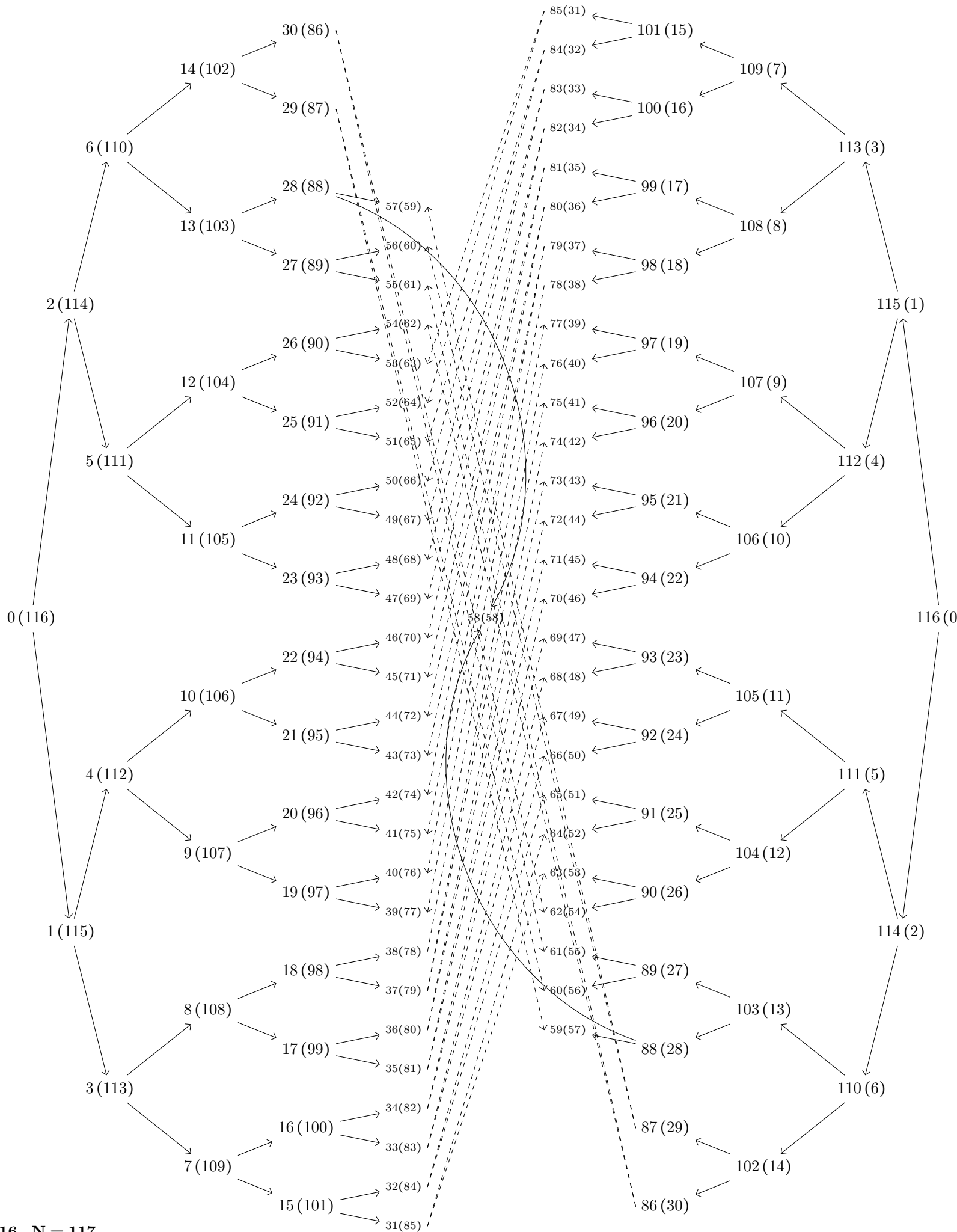


113. N = 114.

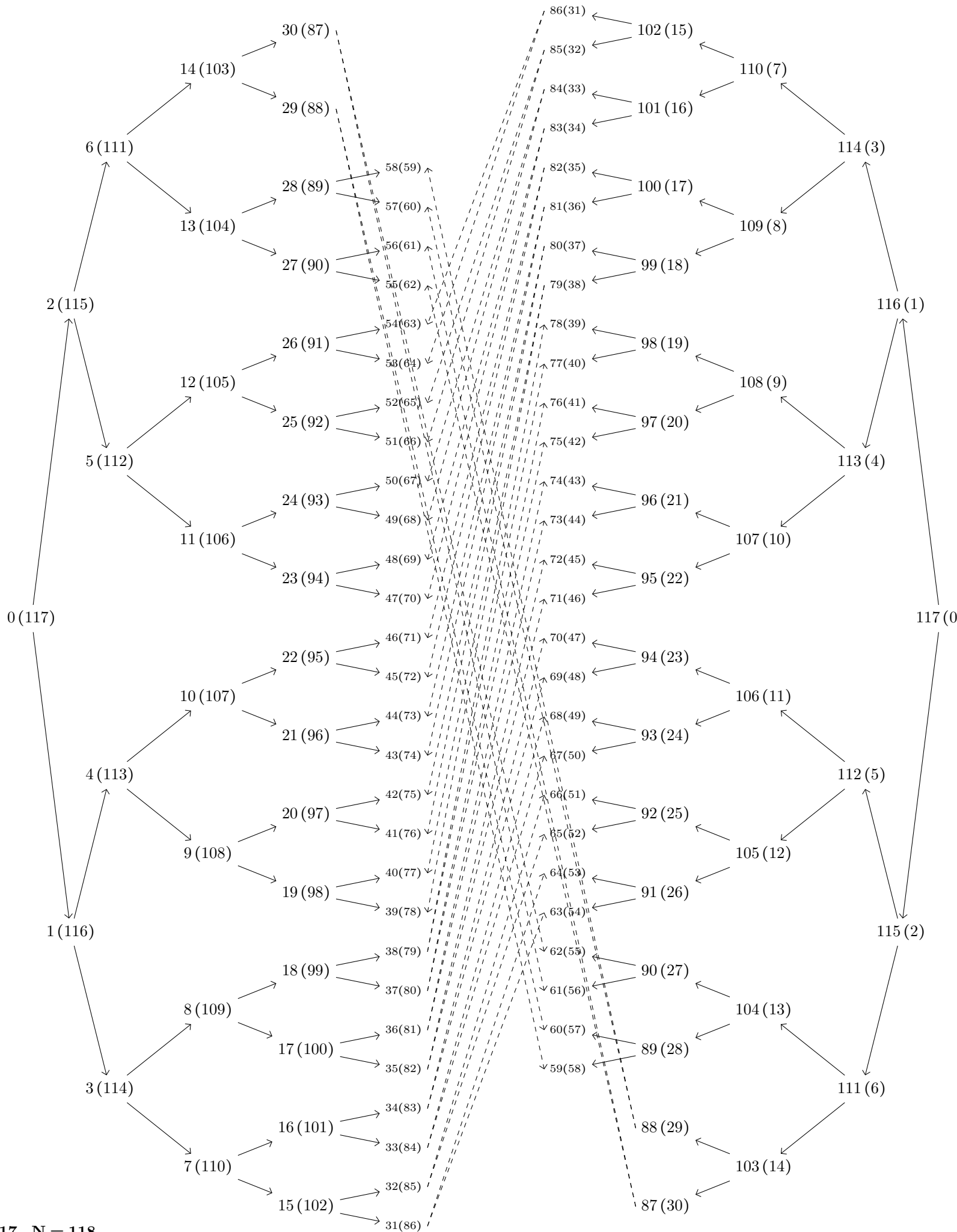


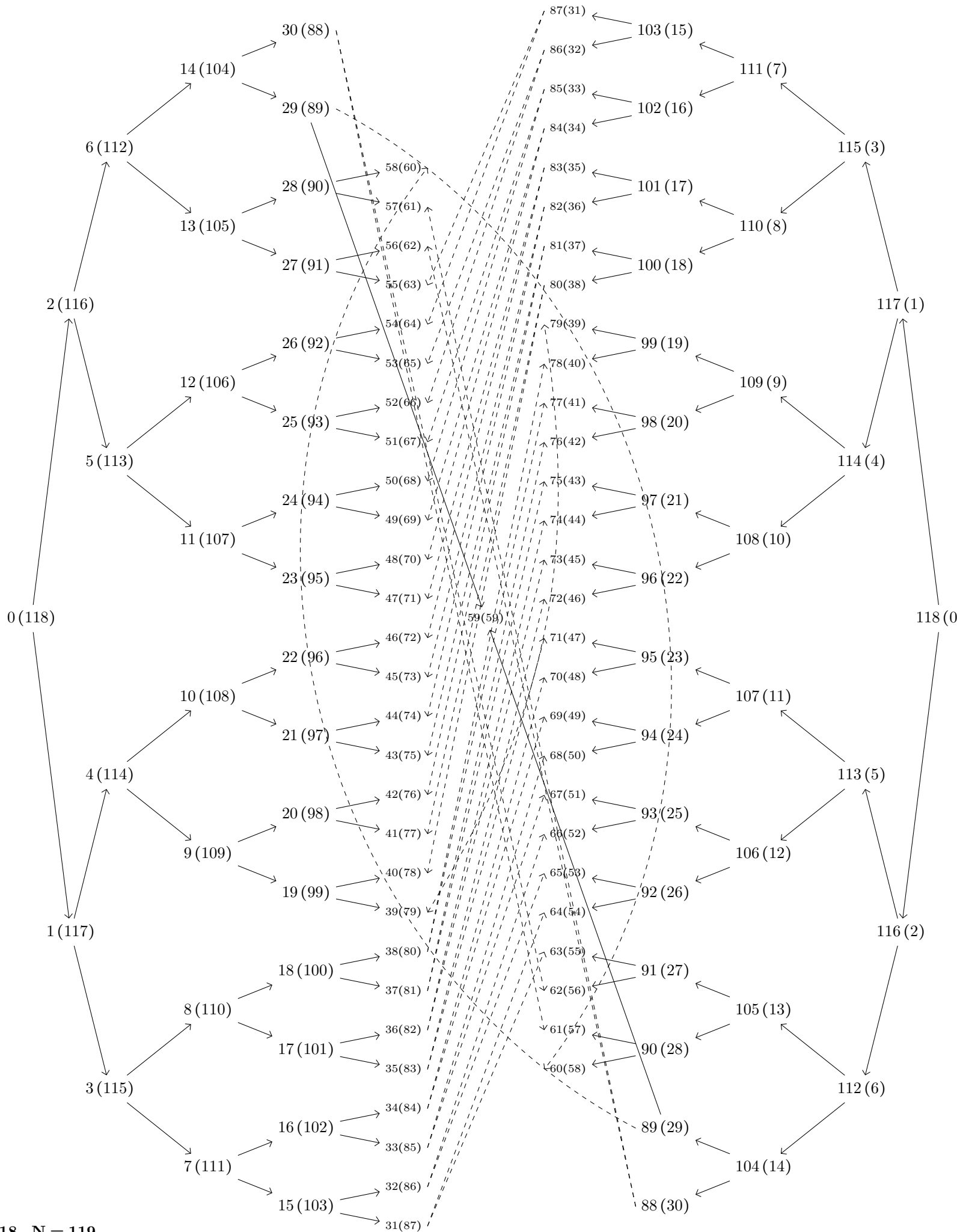
114. N = 115.



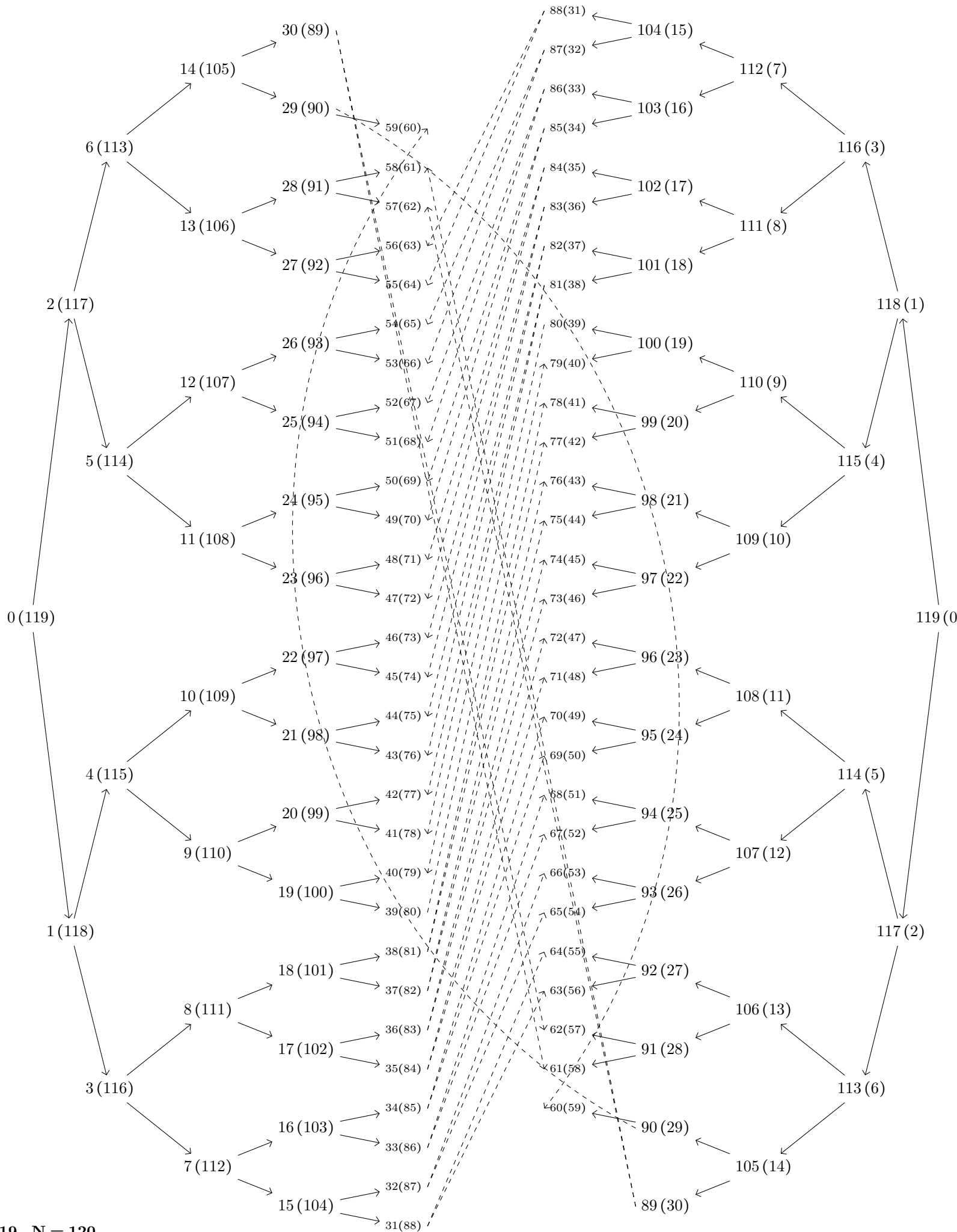


116. N = 117.

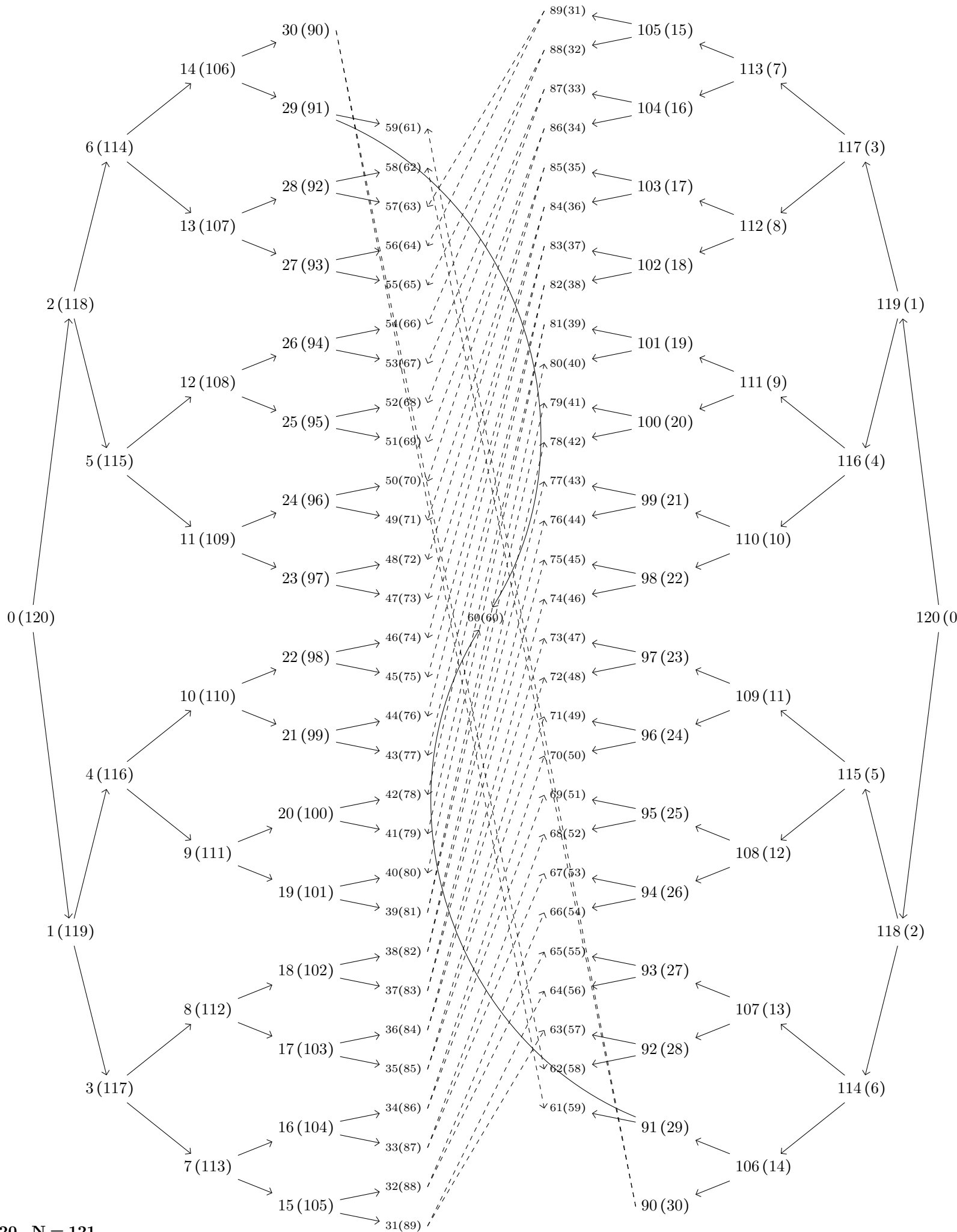


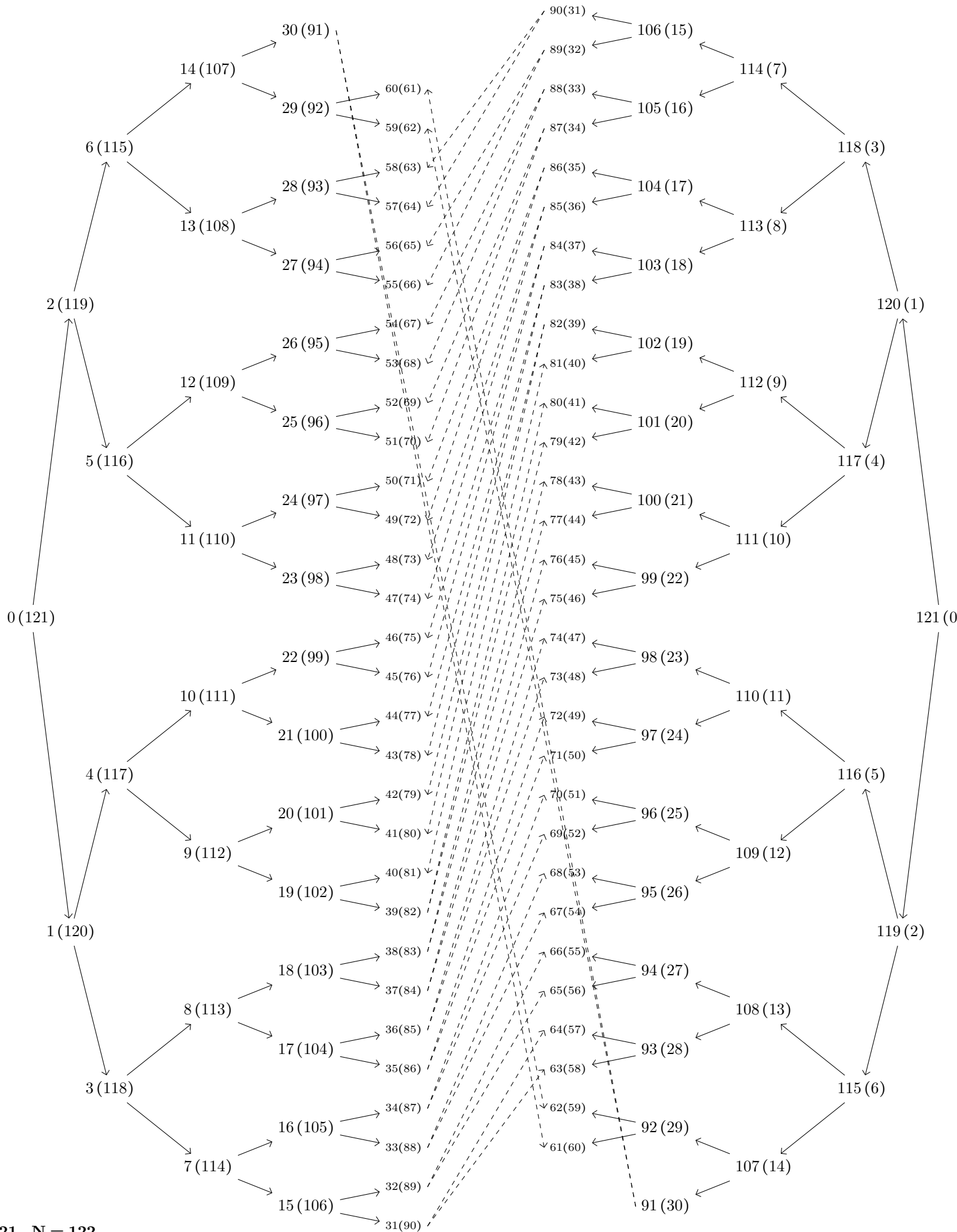


118. N = 119.

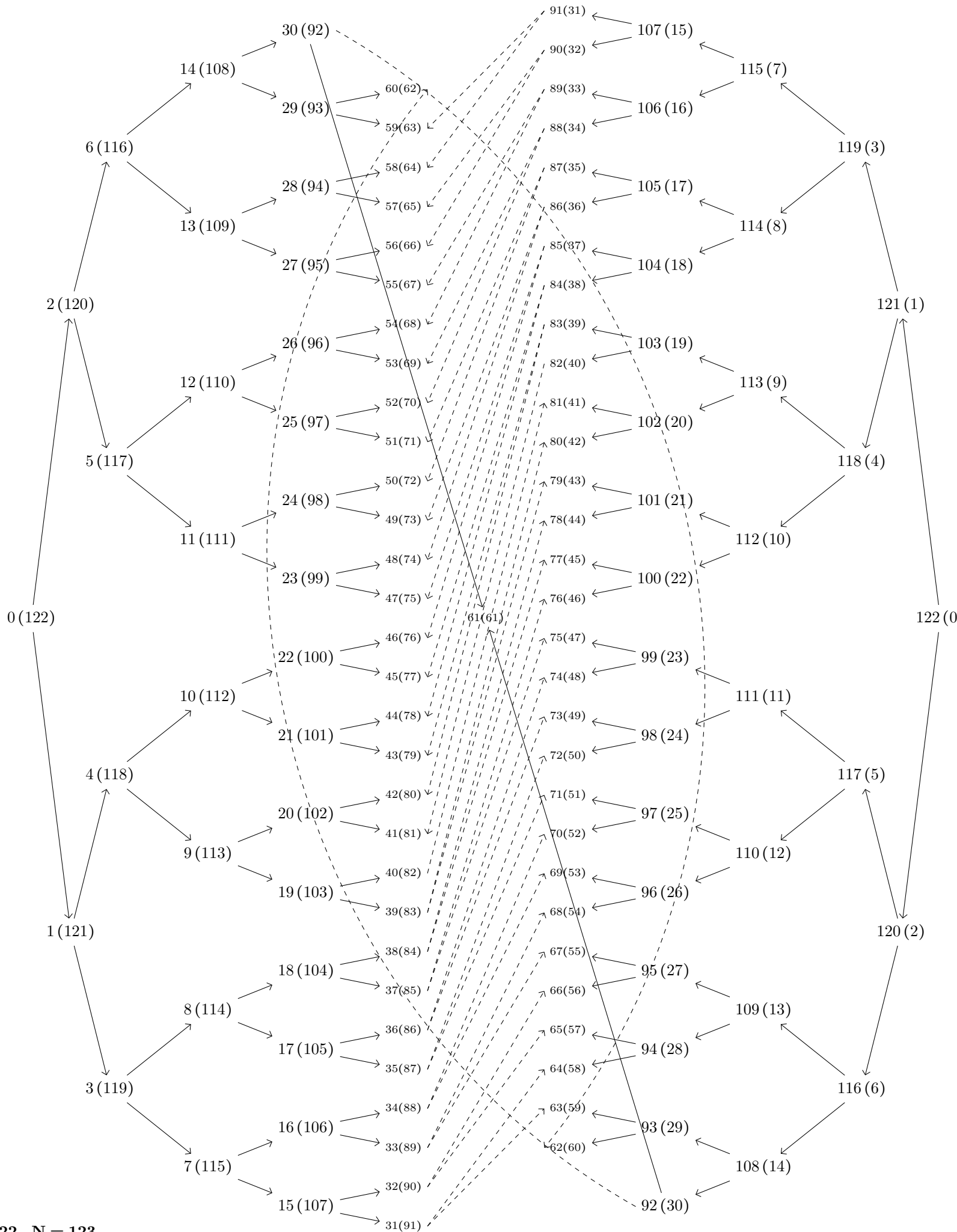


119. N = 120.

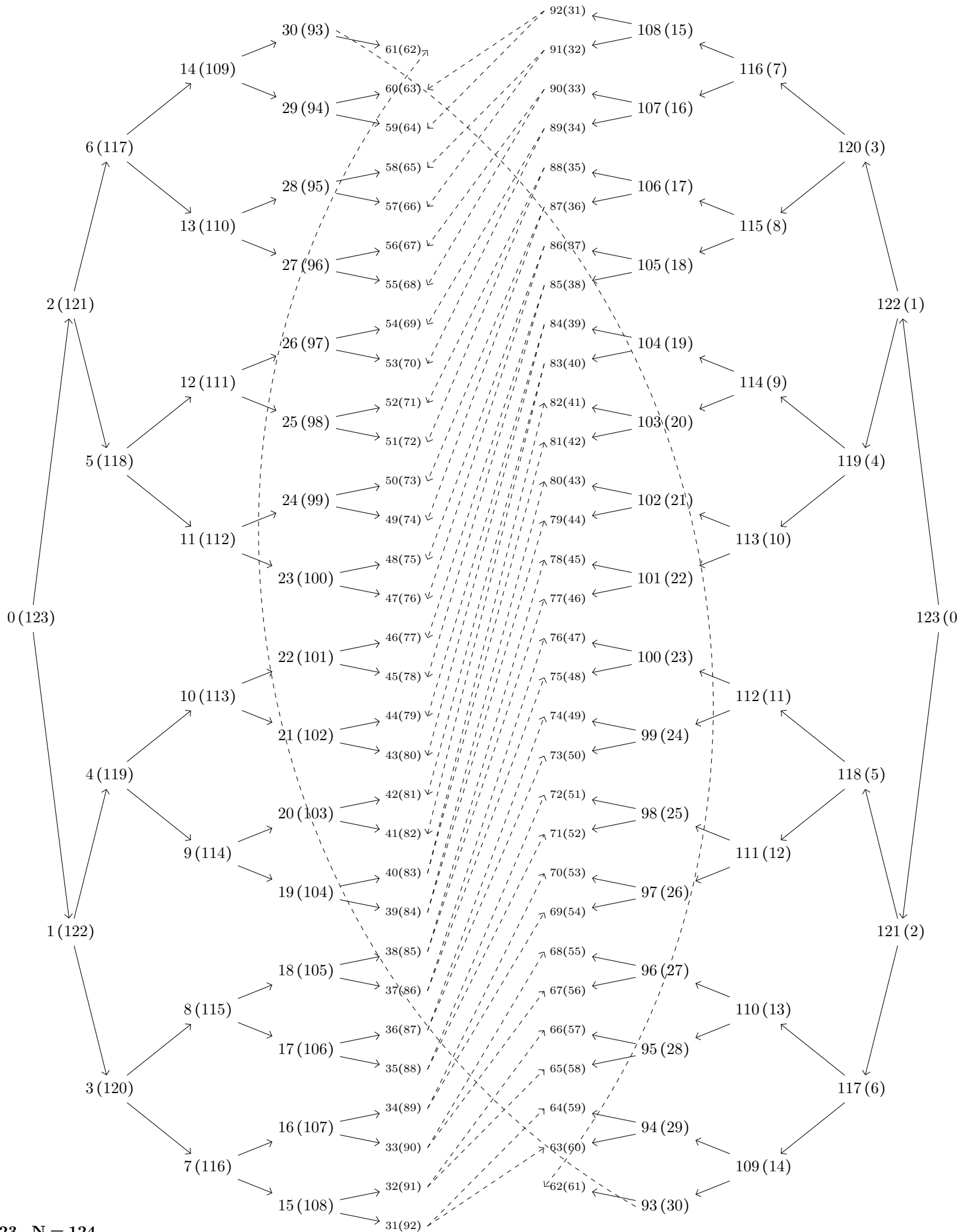


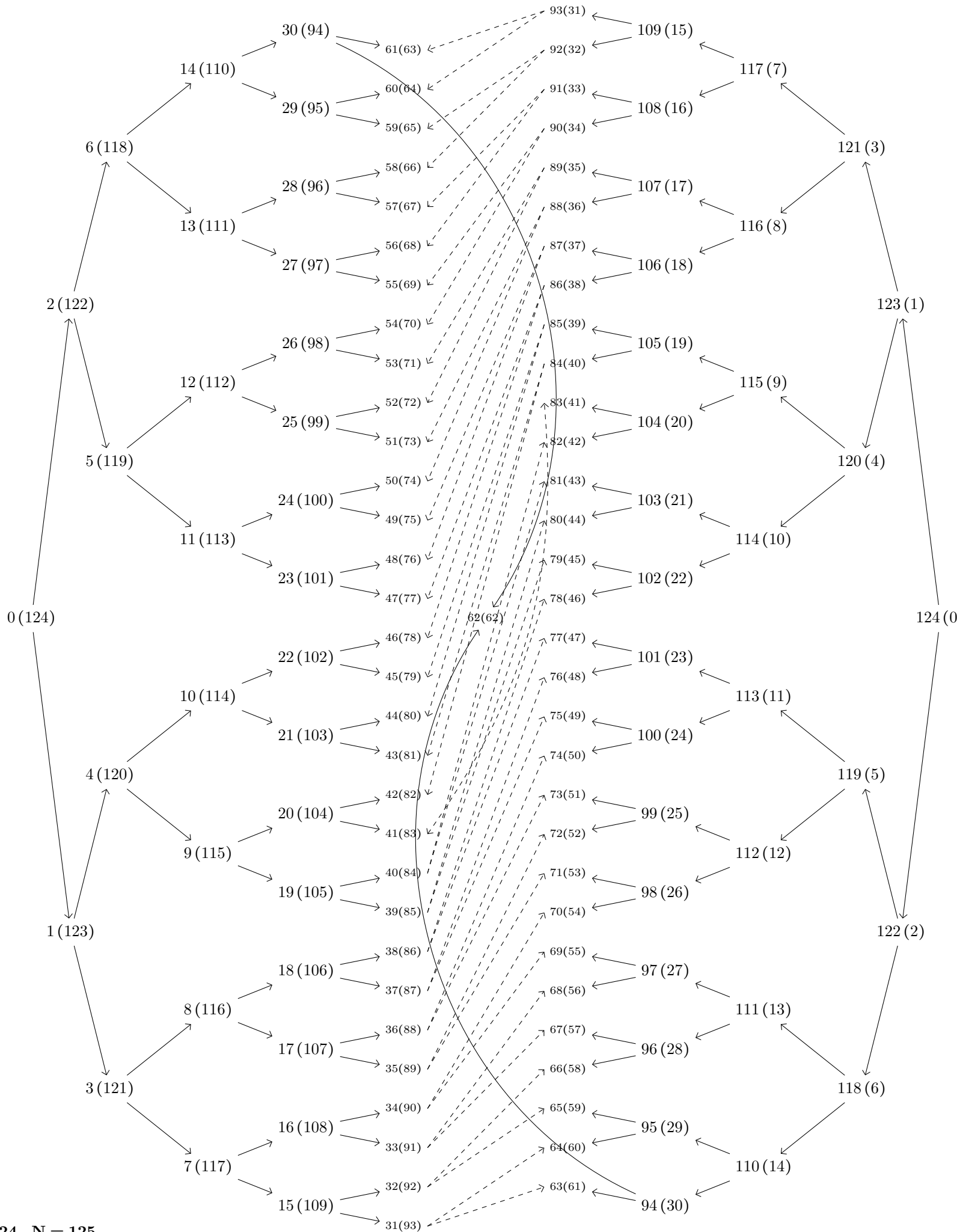


121. N = 122.

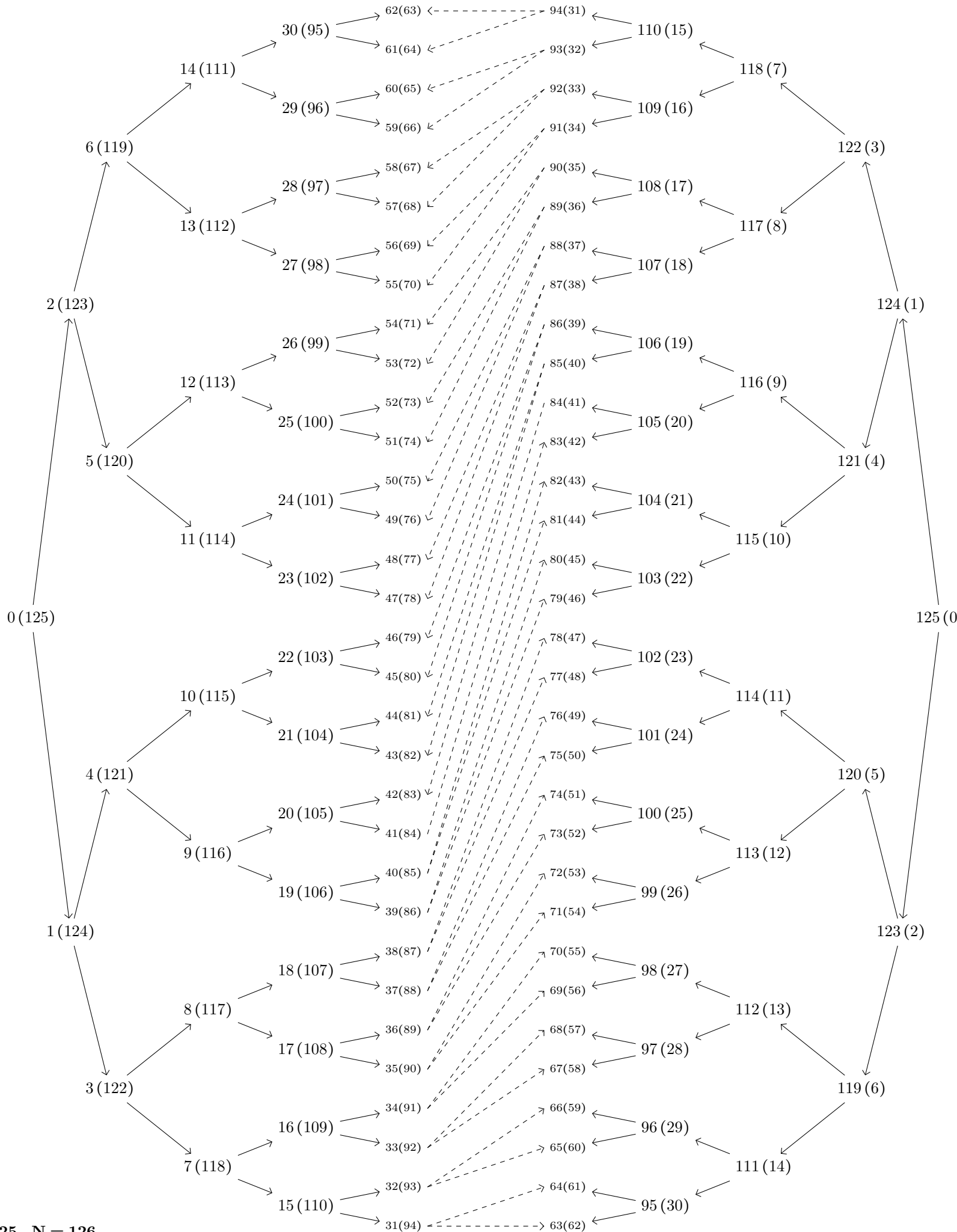


122. N = 123.

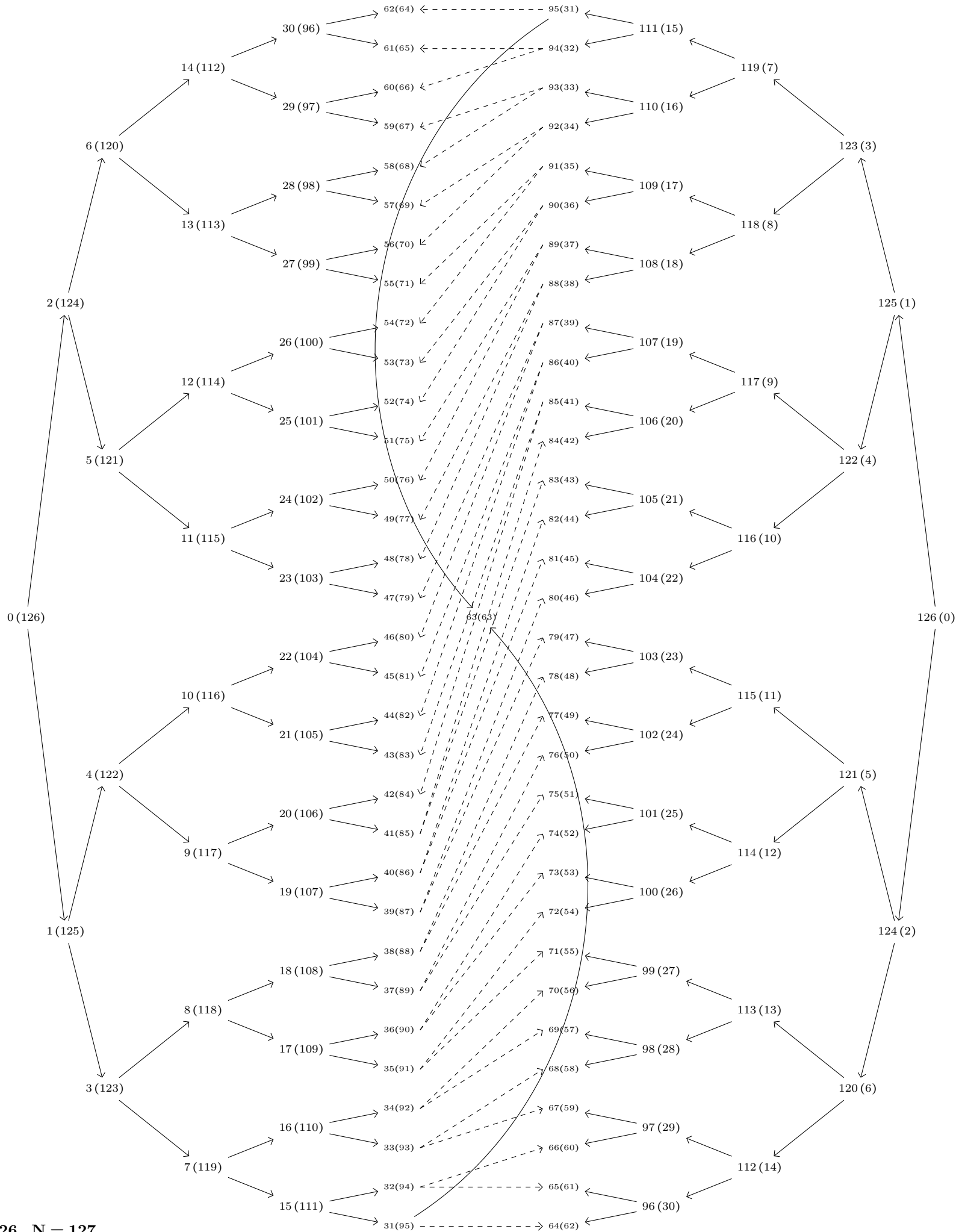


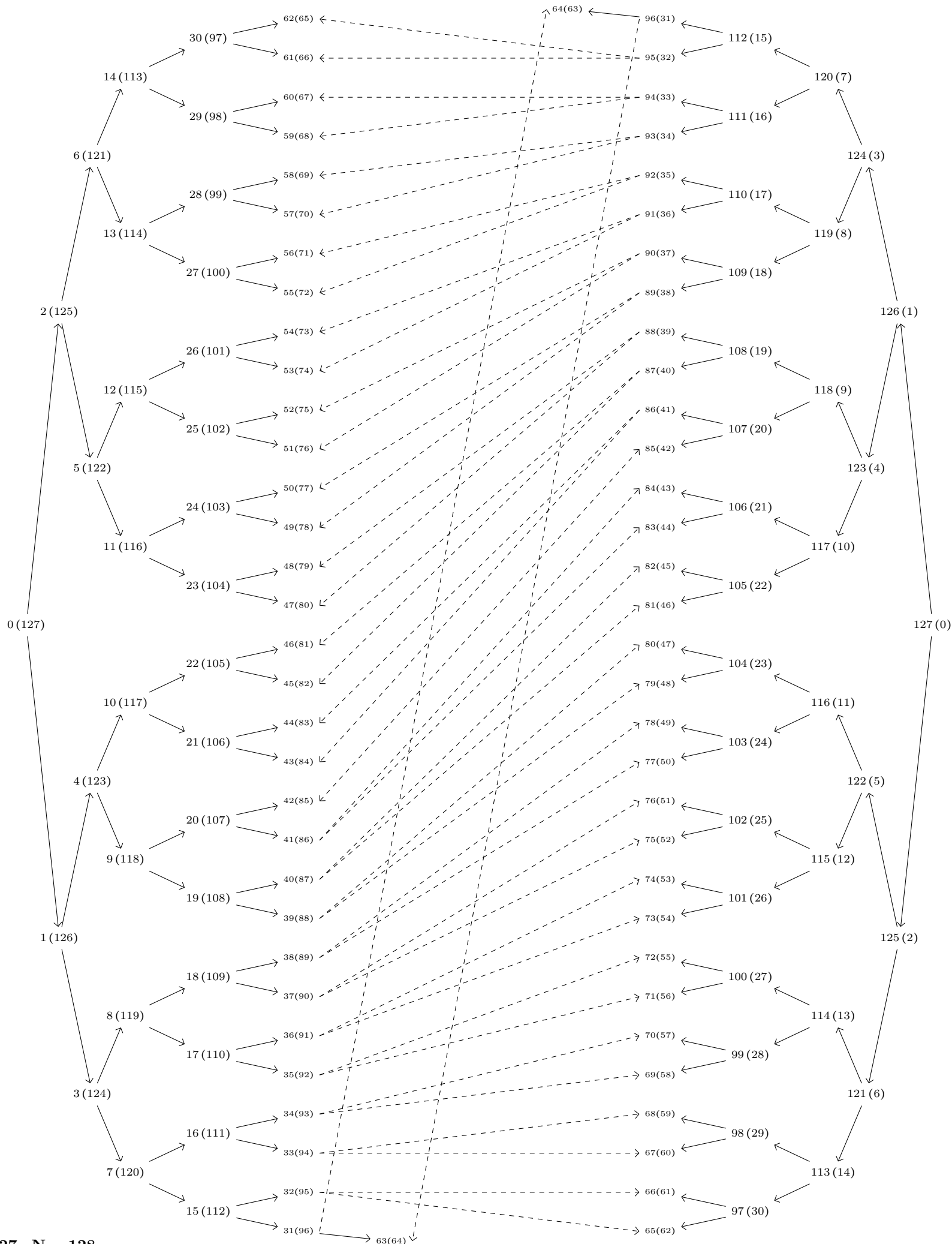


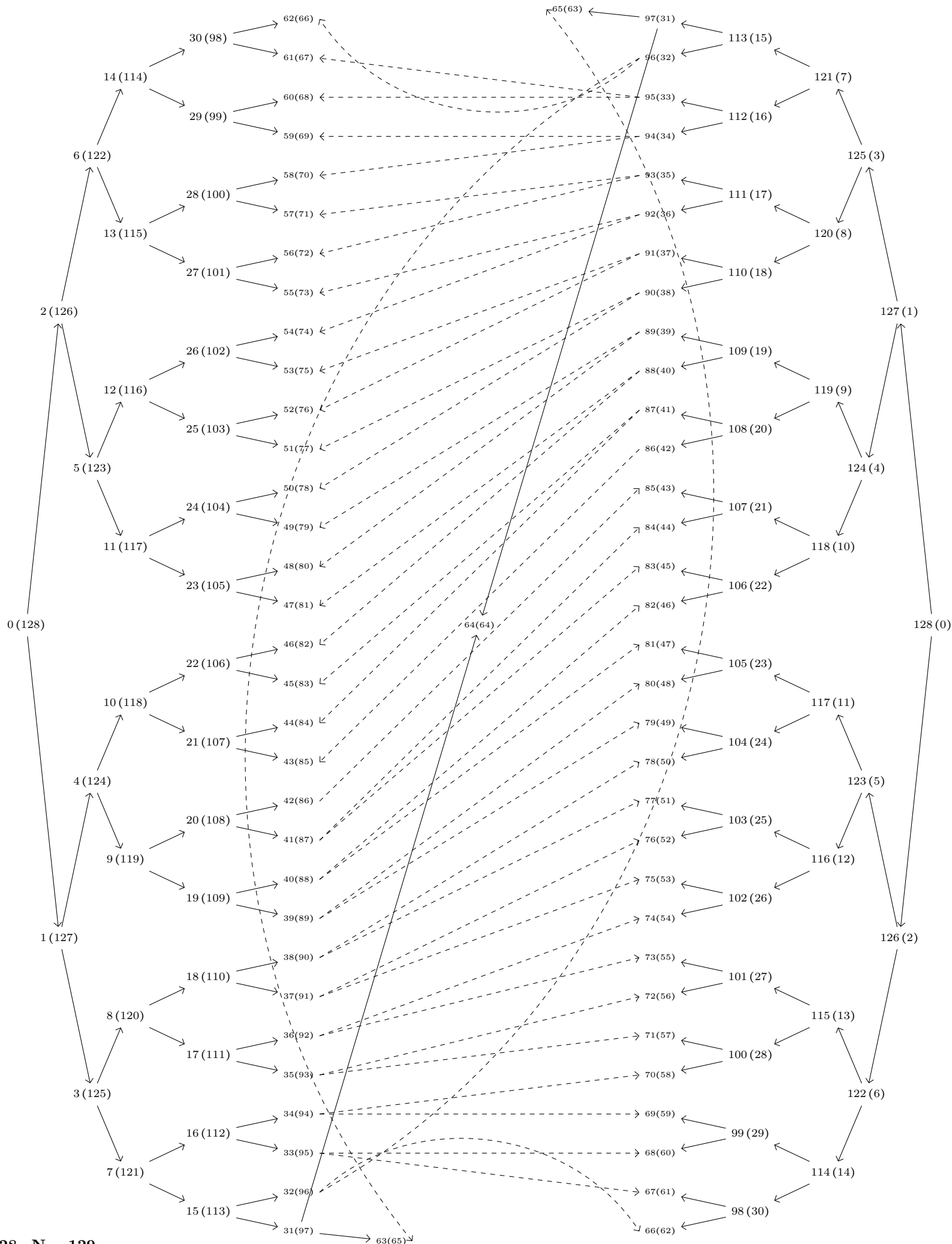
124. N = 125.

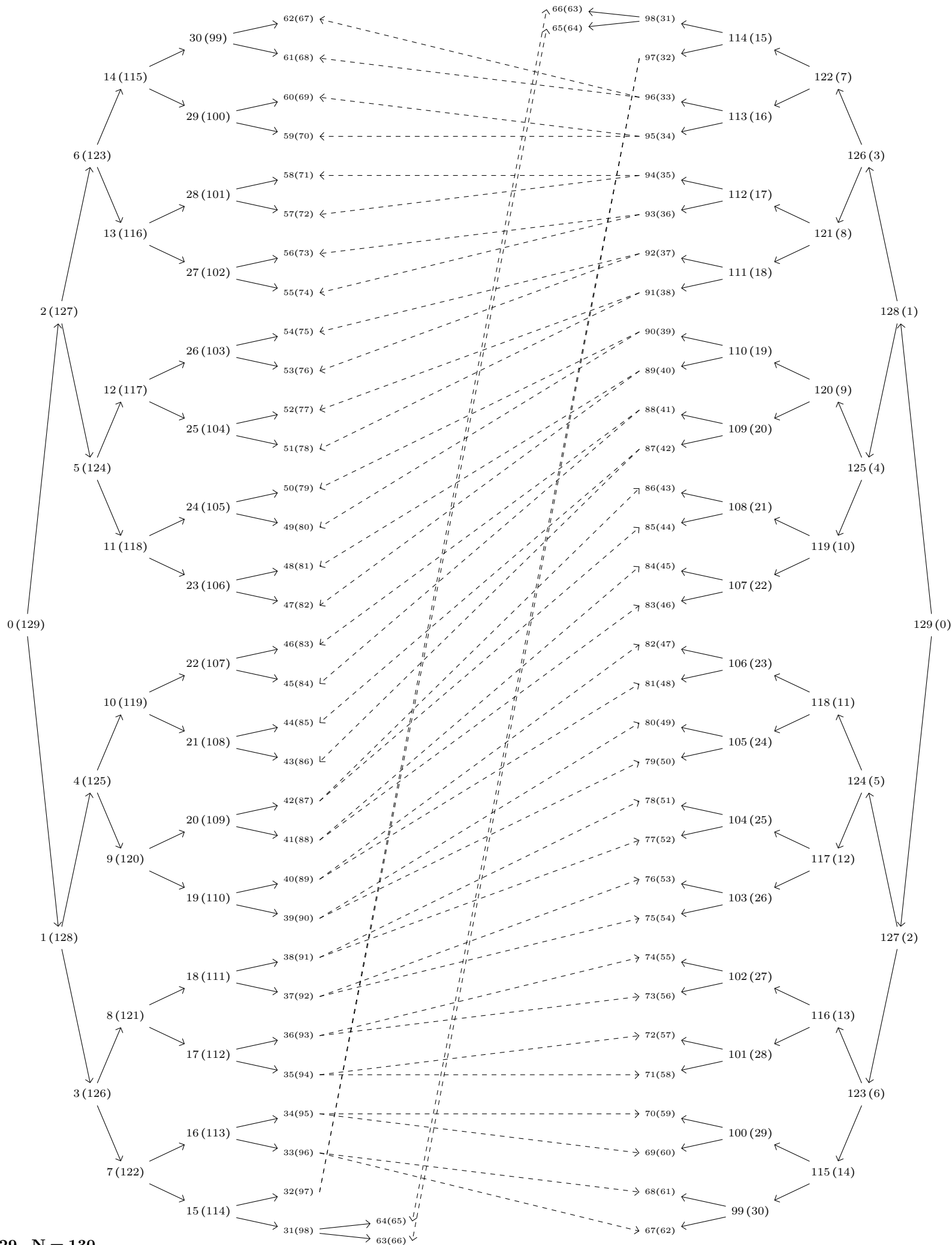


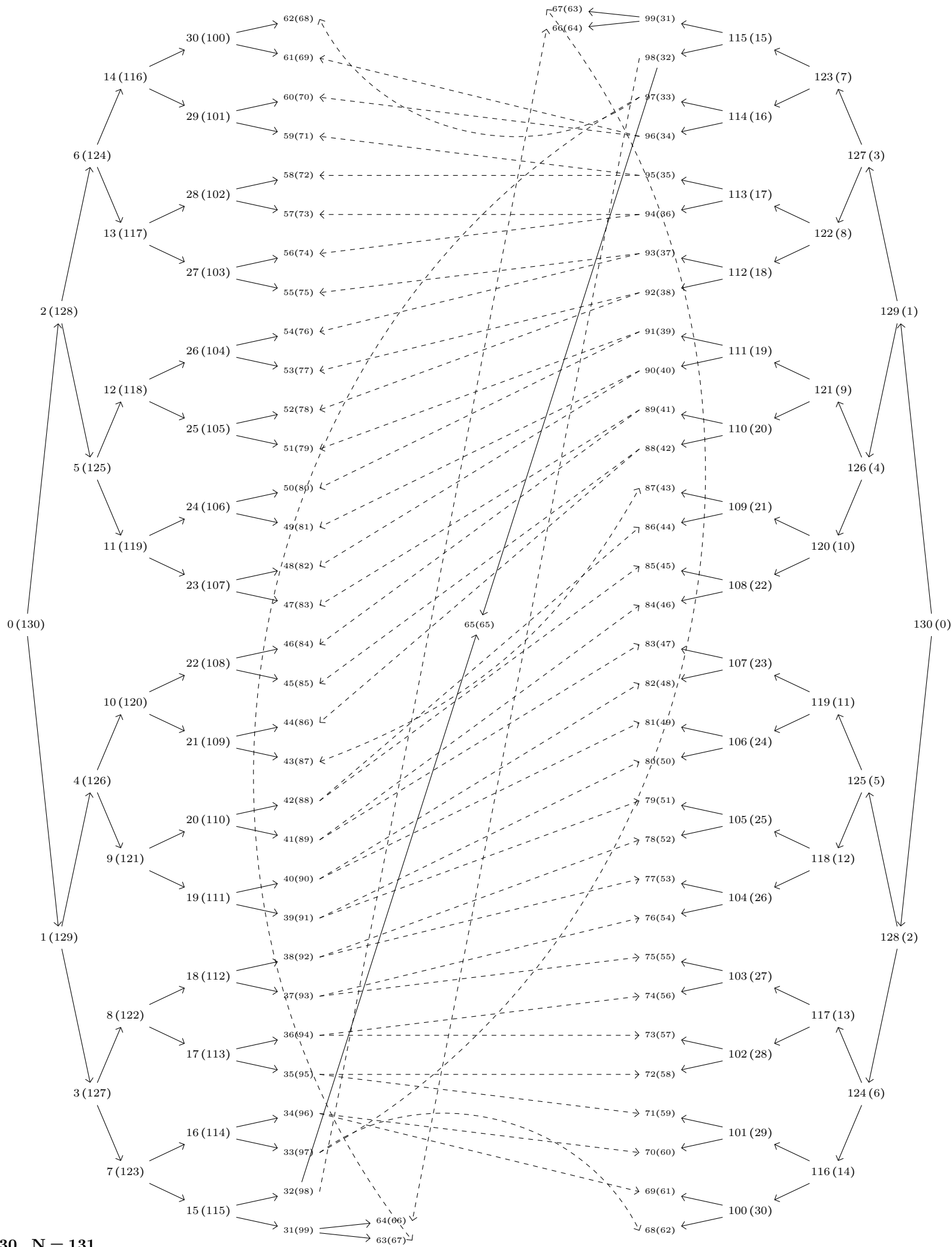
126. N = 127.



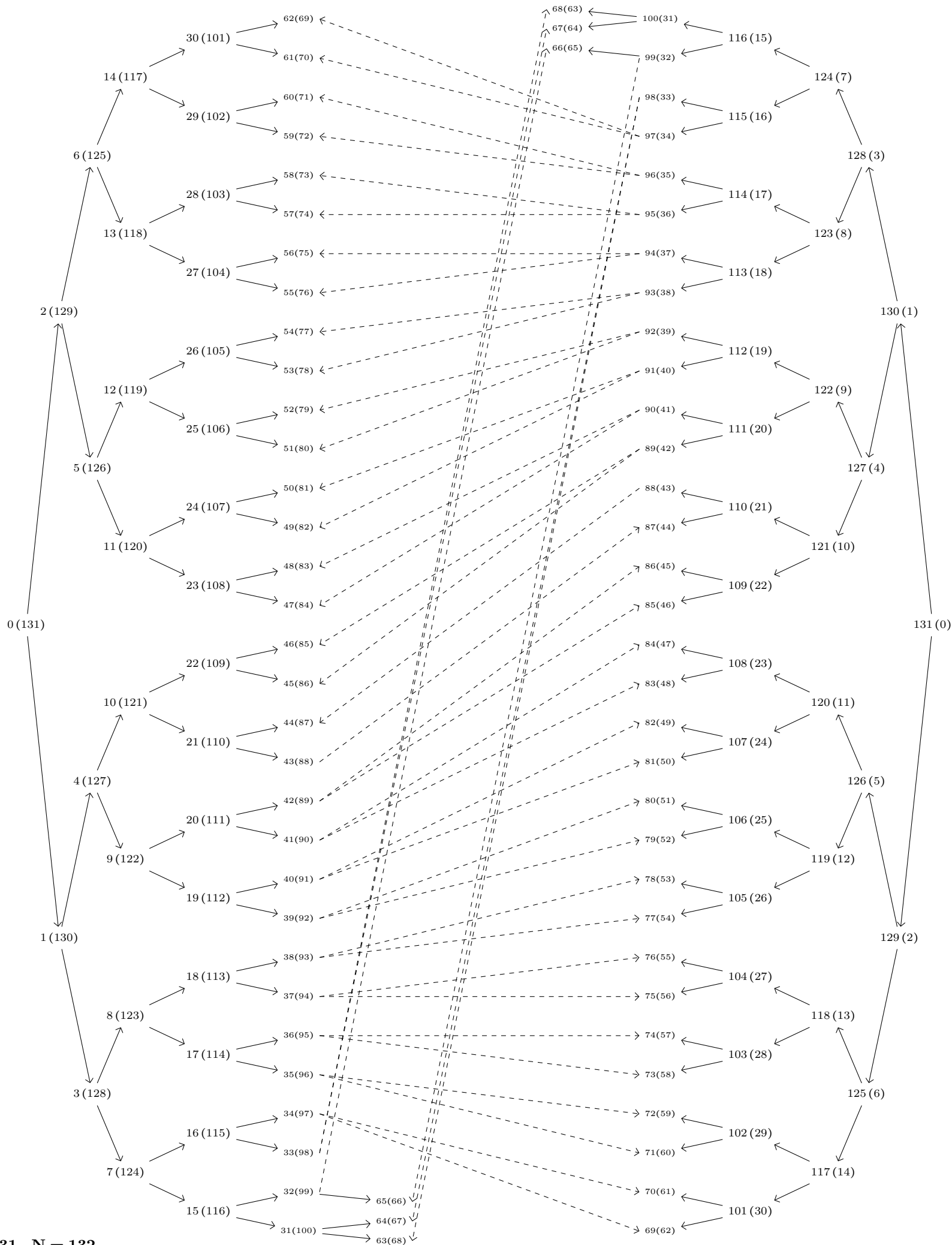




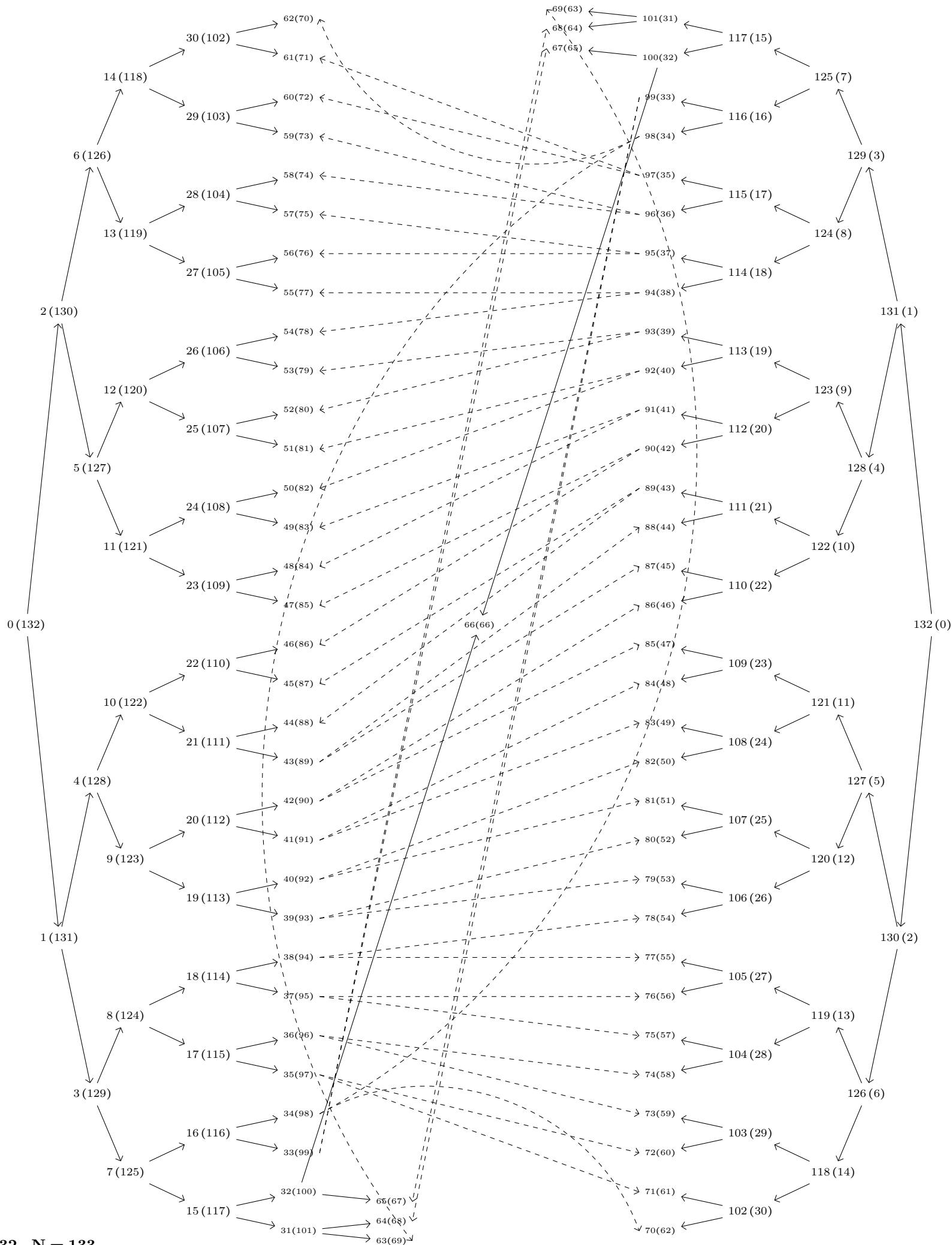


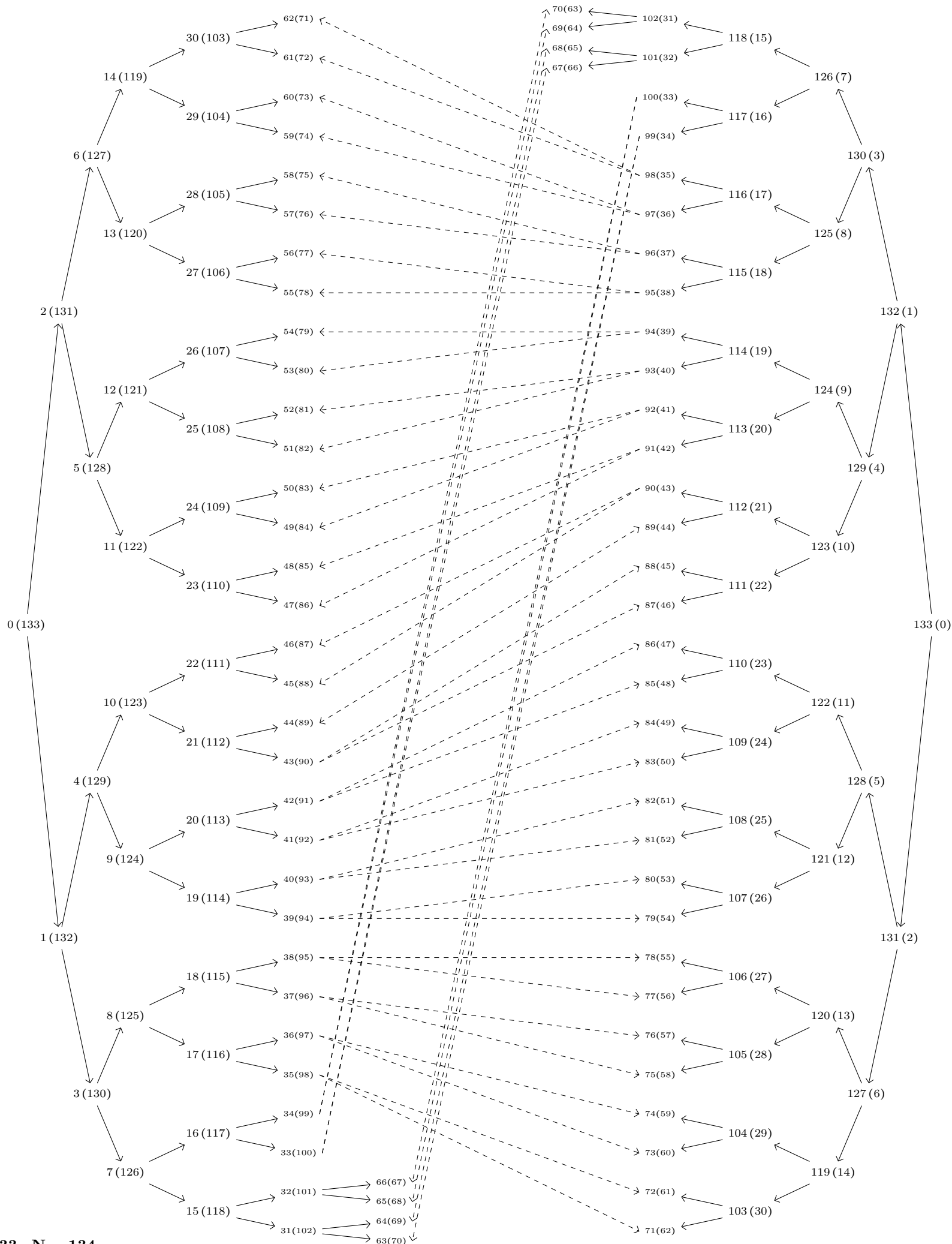


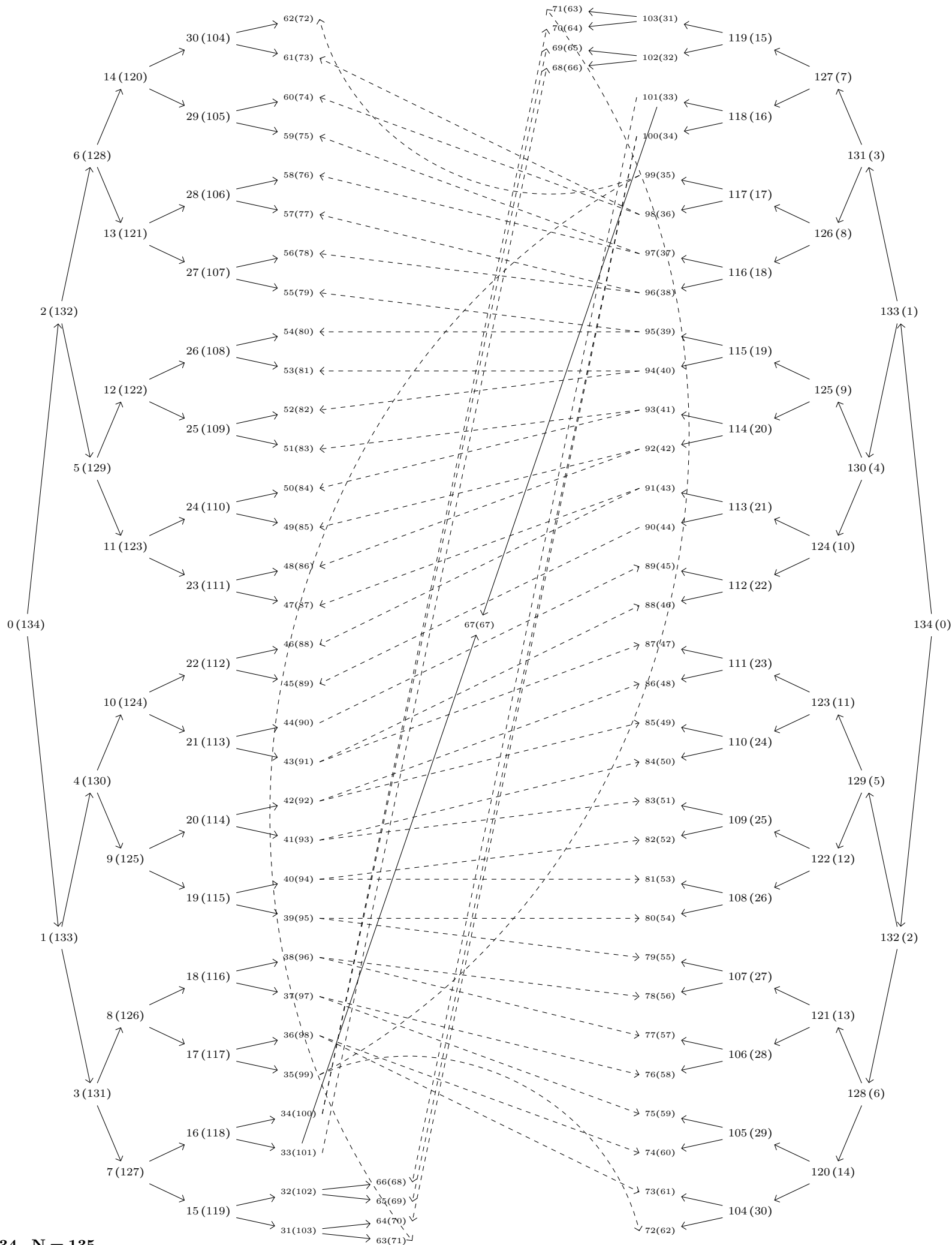
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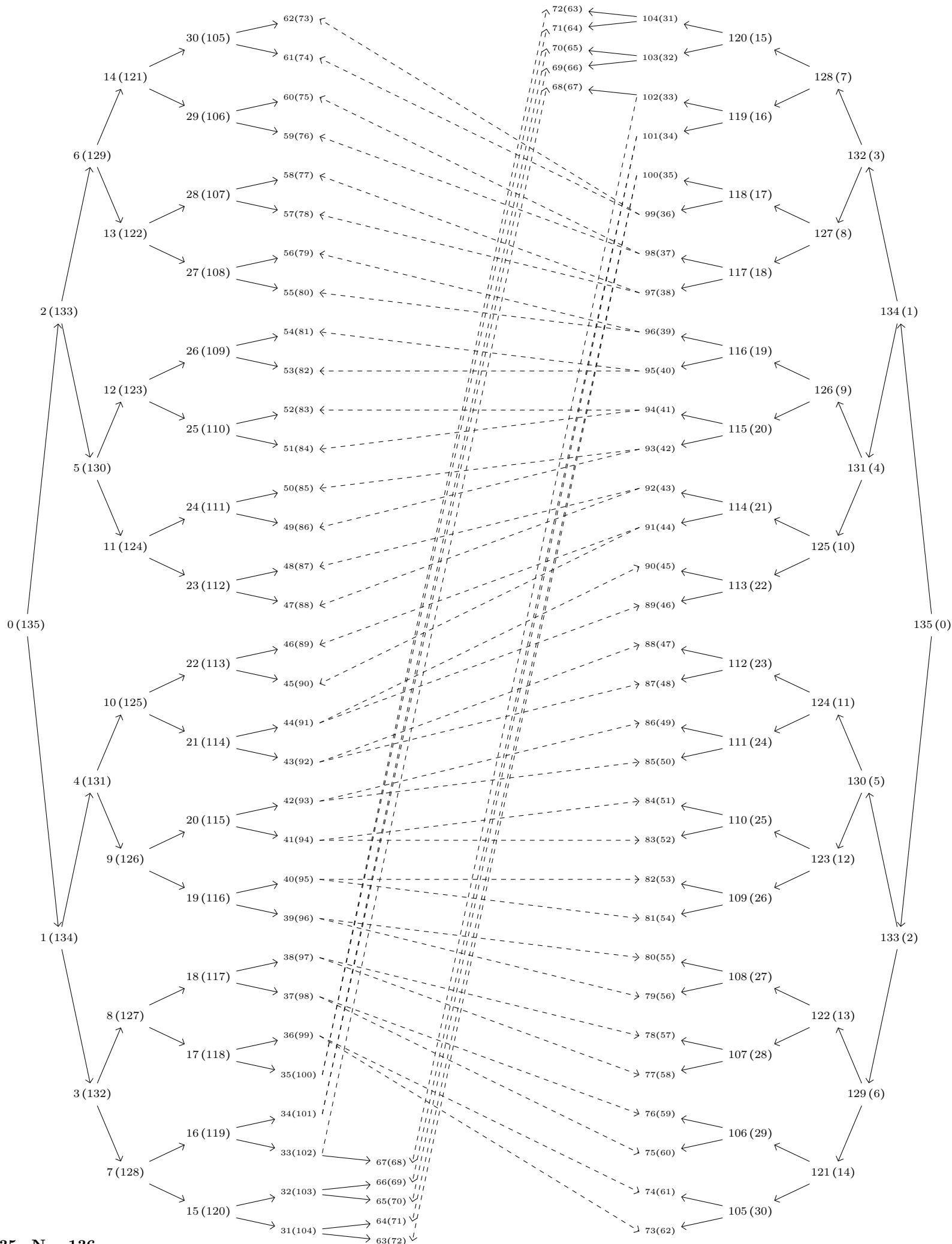


131. N = 132.

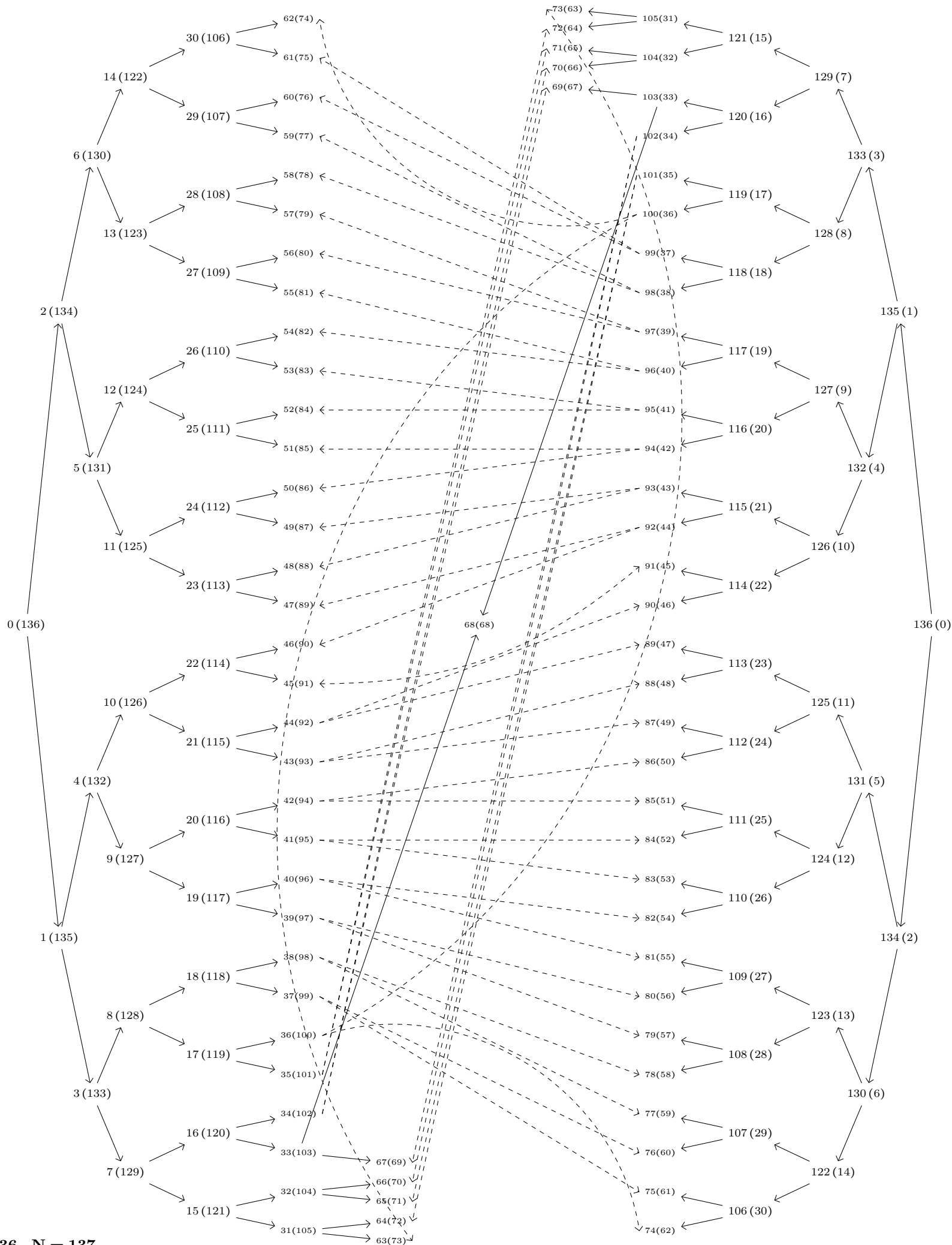




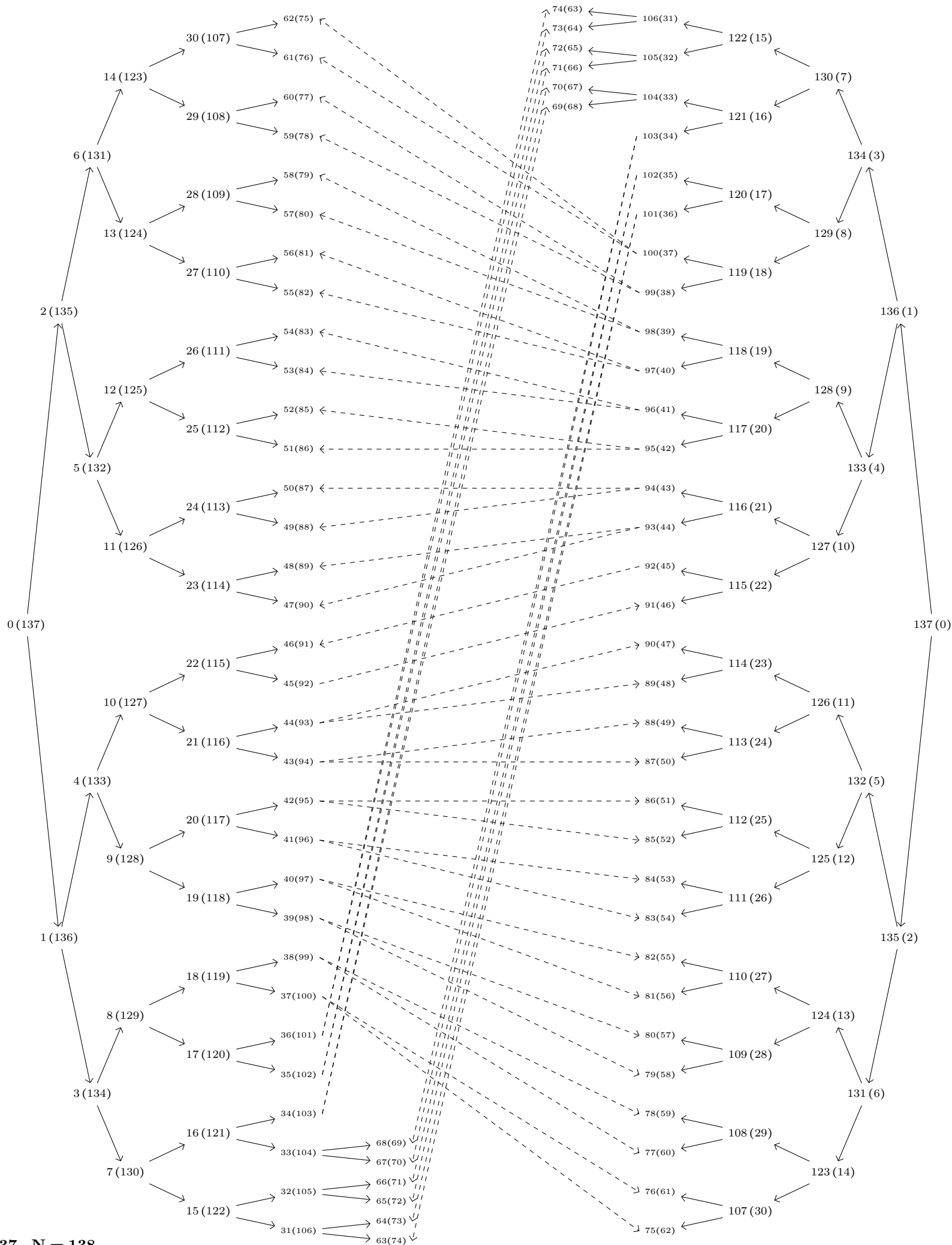




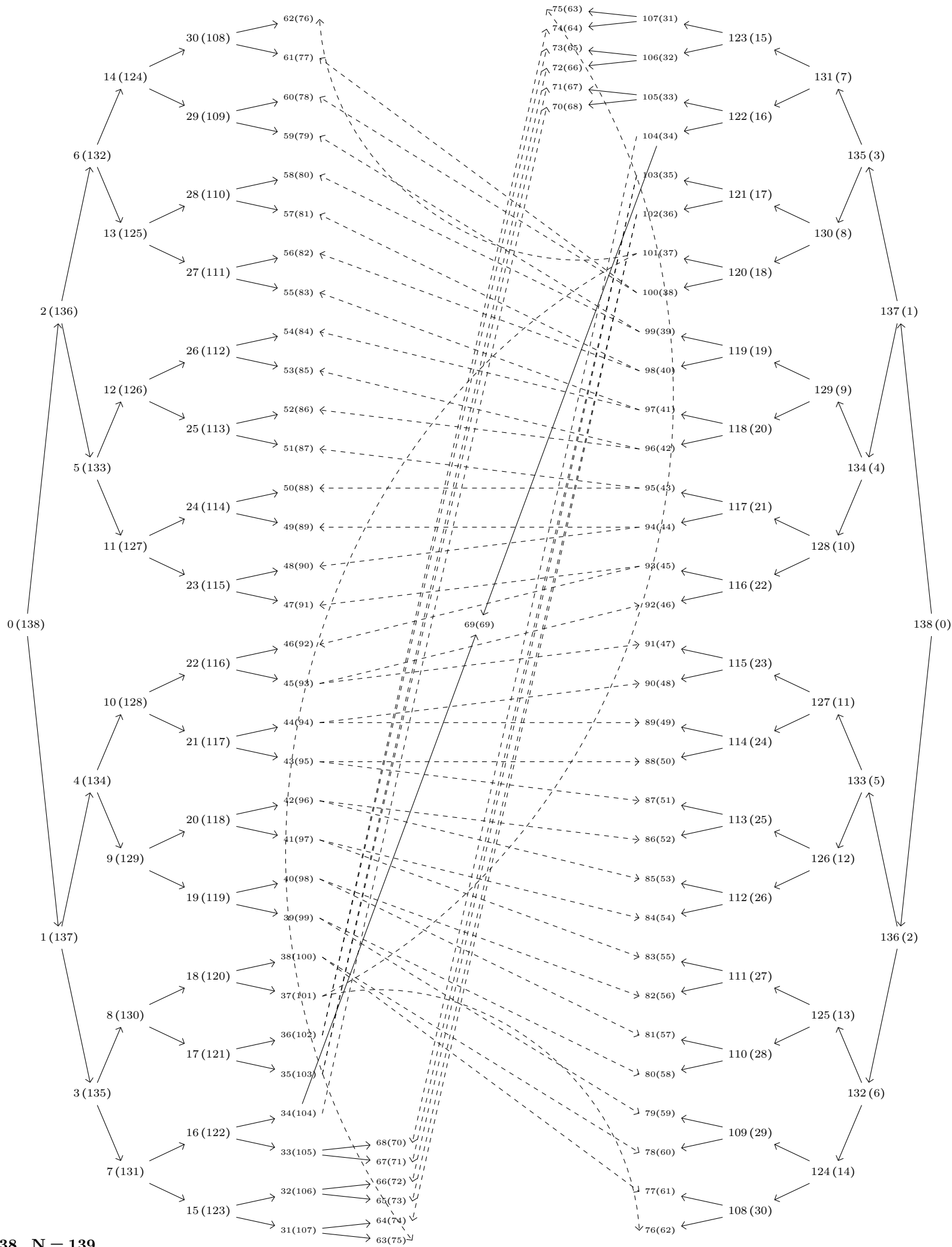
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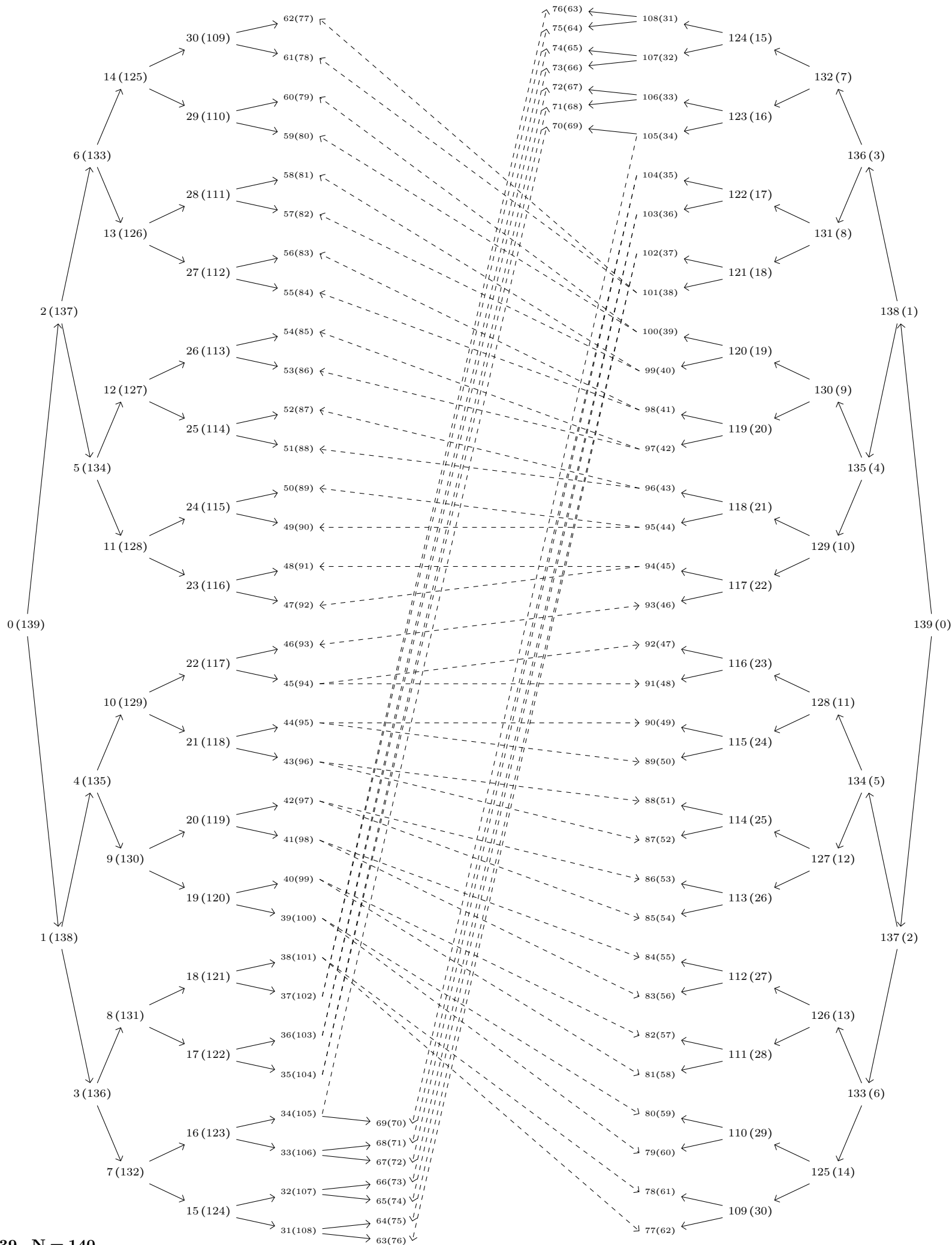
136. N = 137.



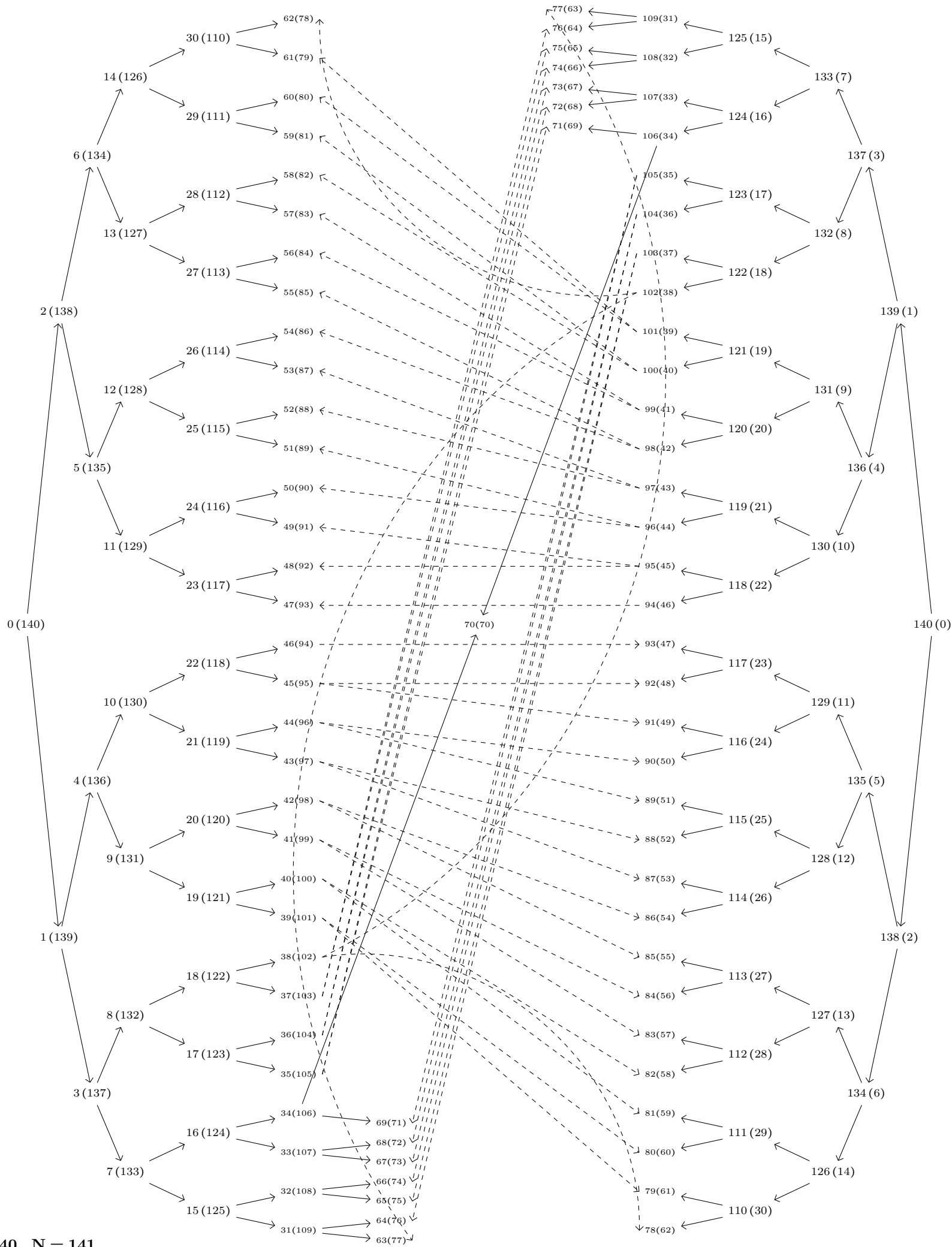
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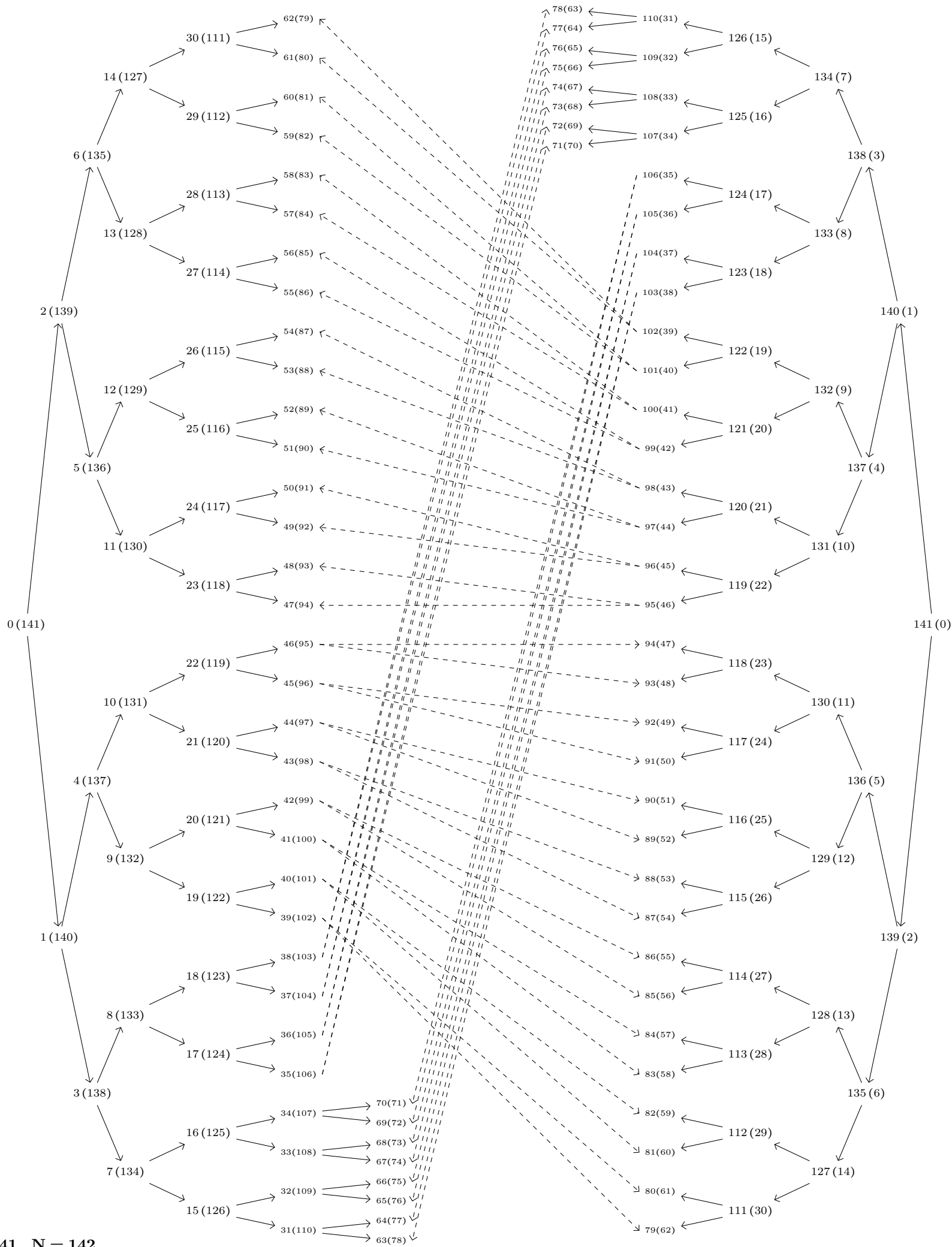


138. N = 139.

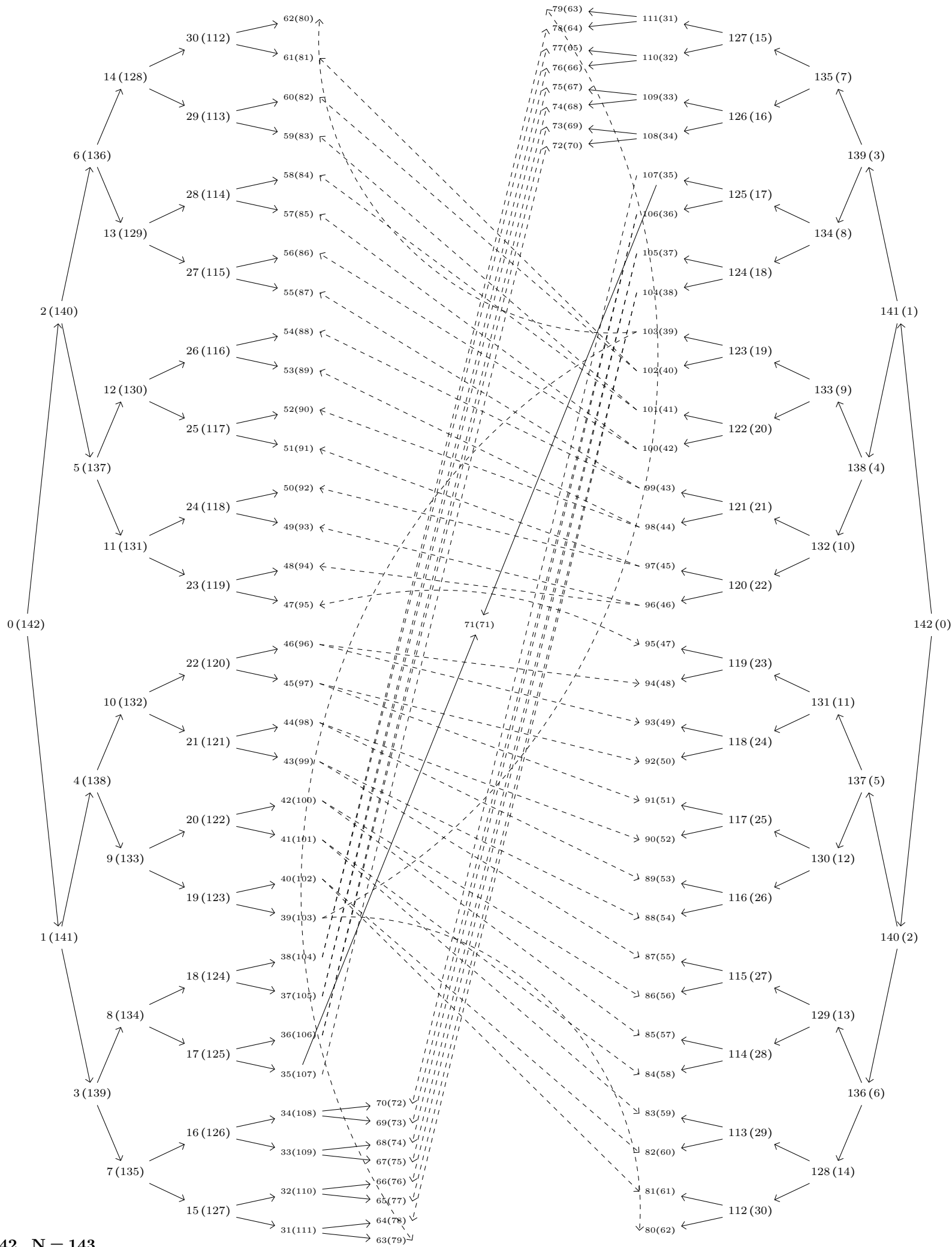


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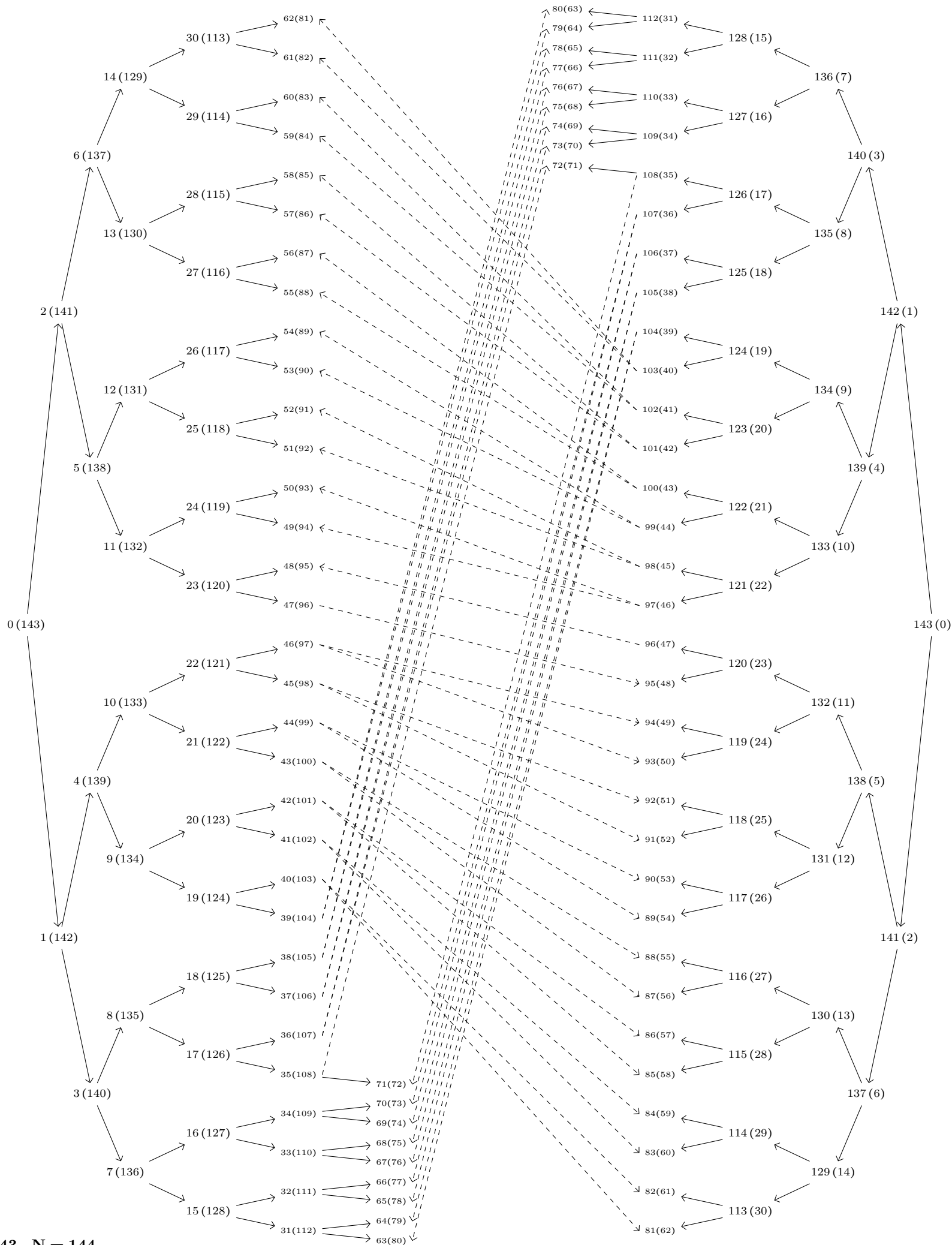




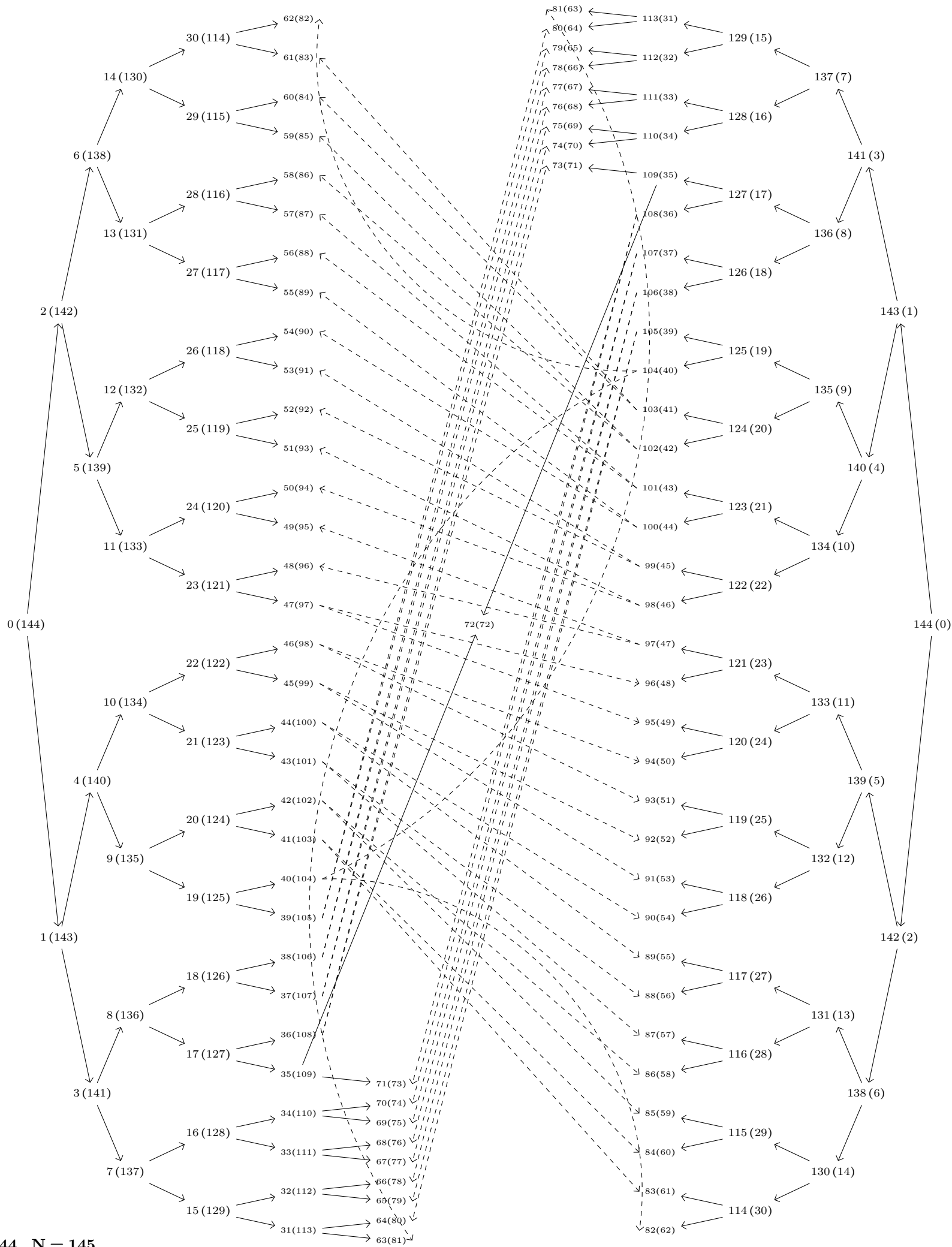
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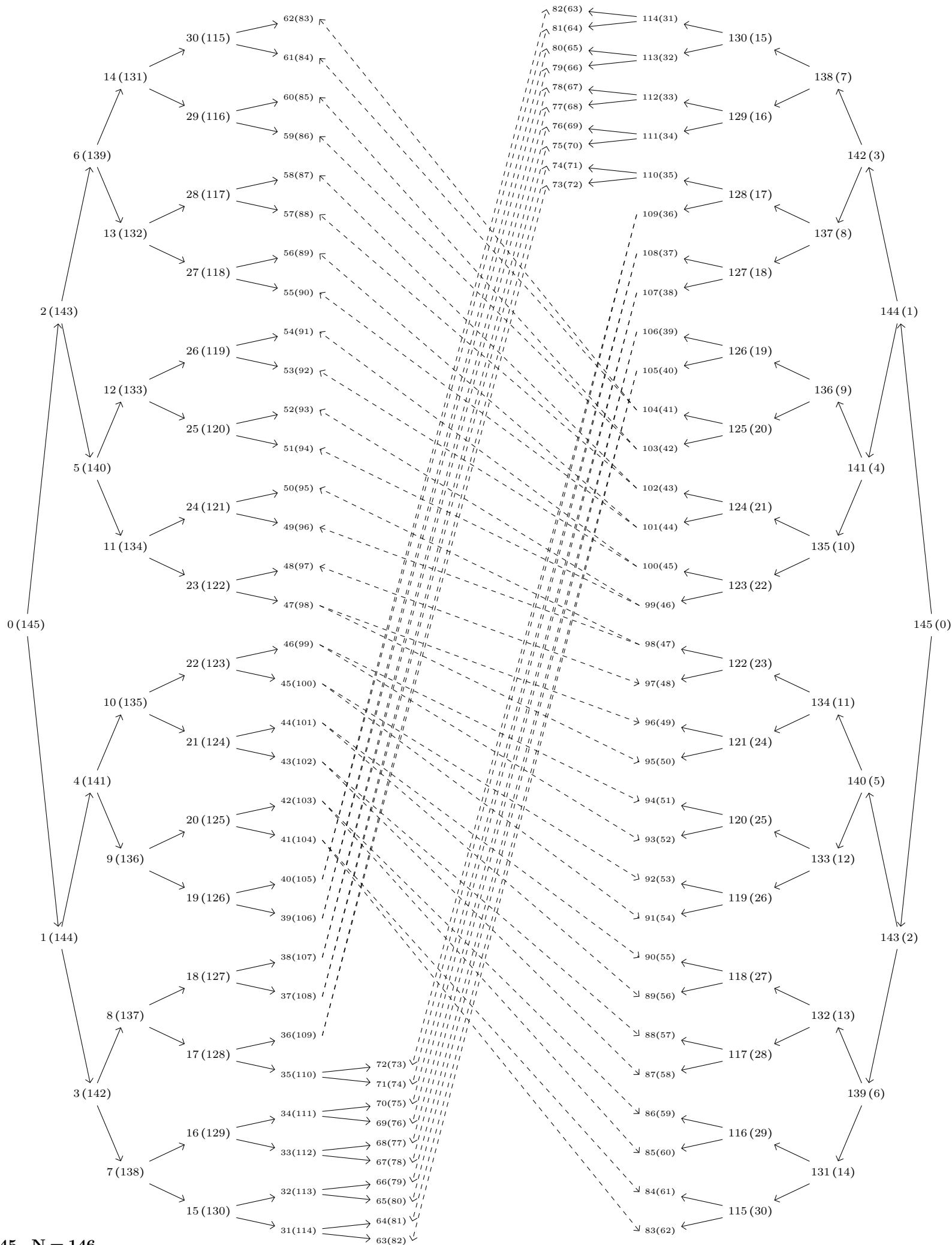
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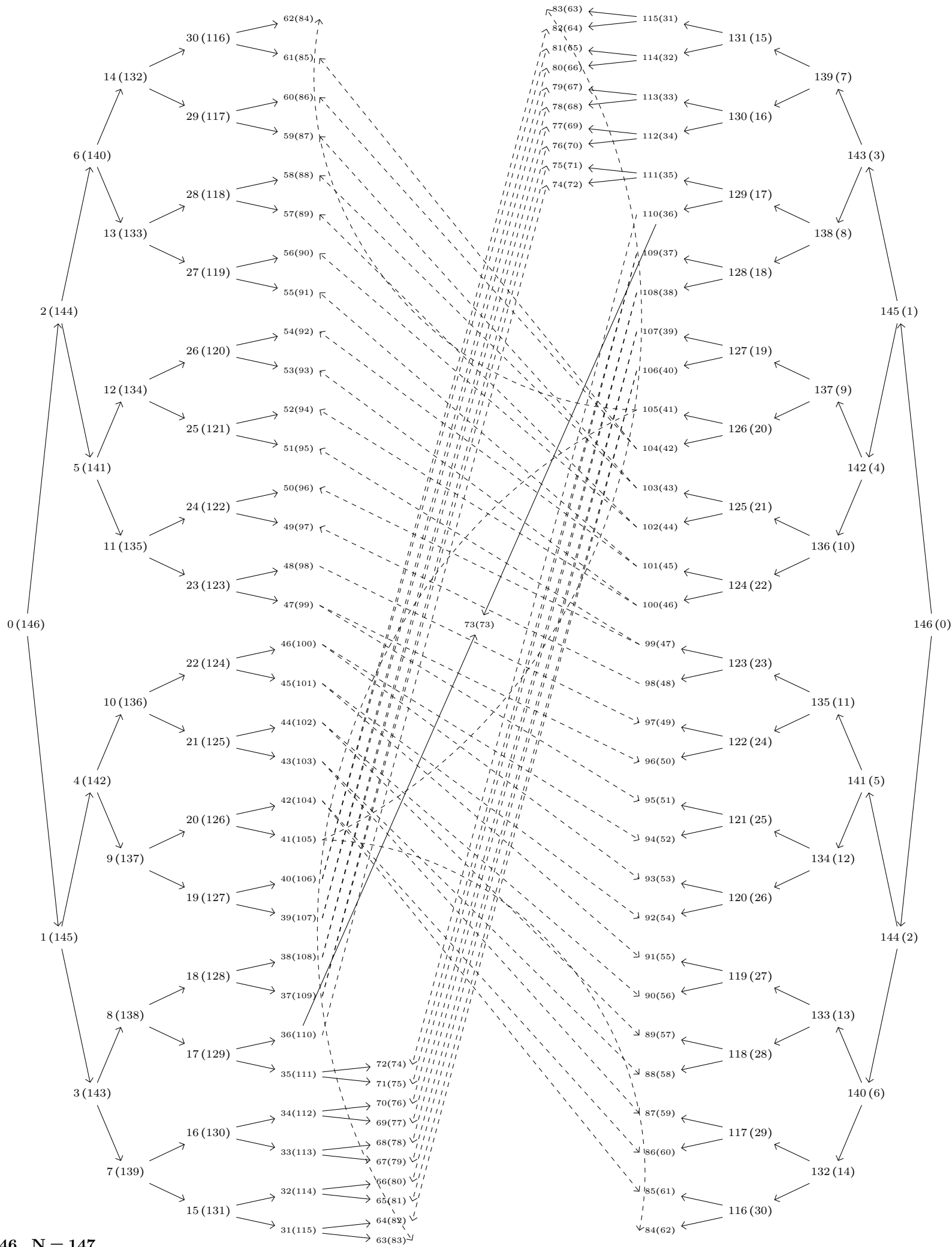


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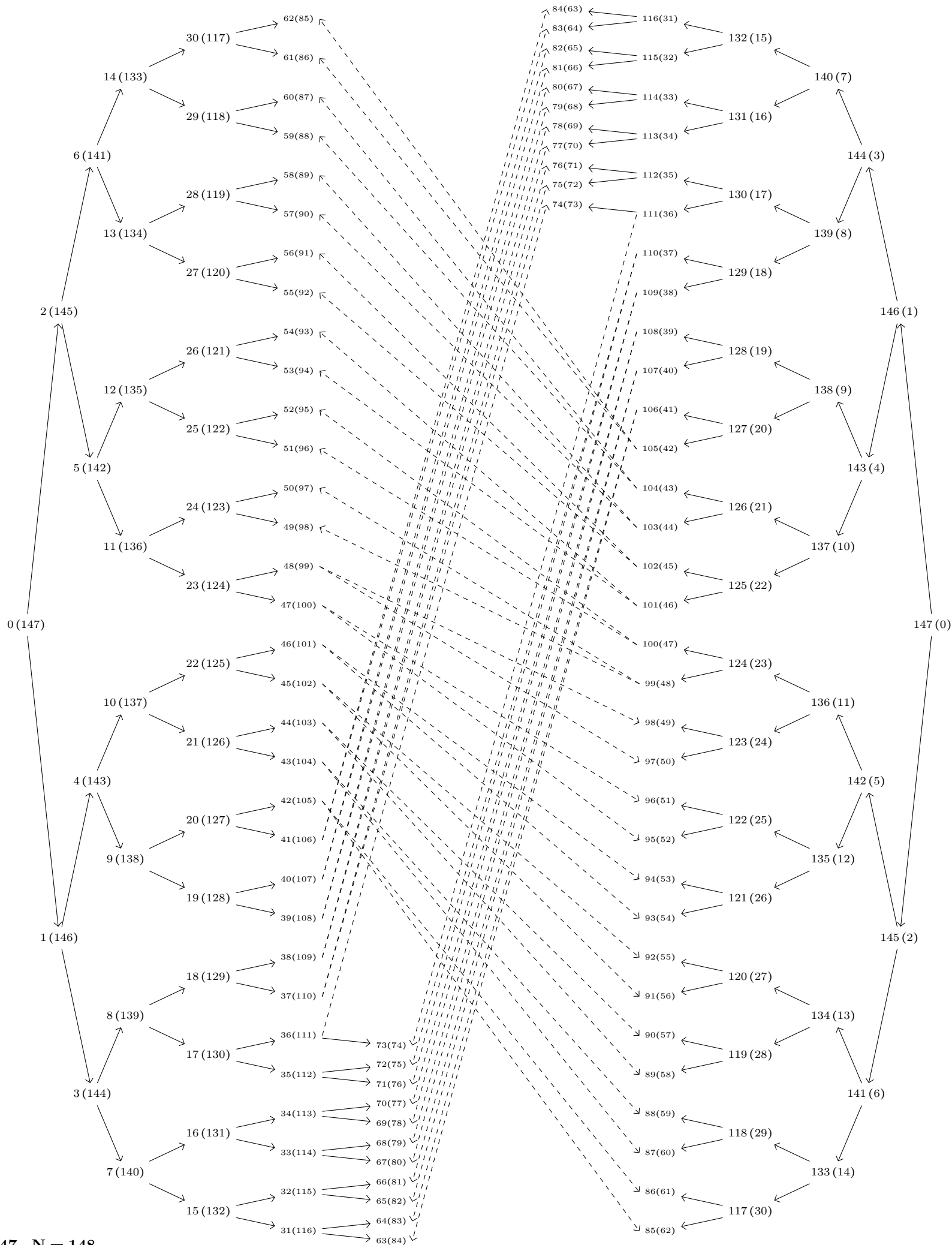


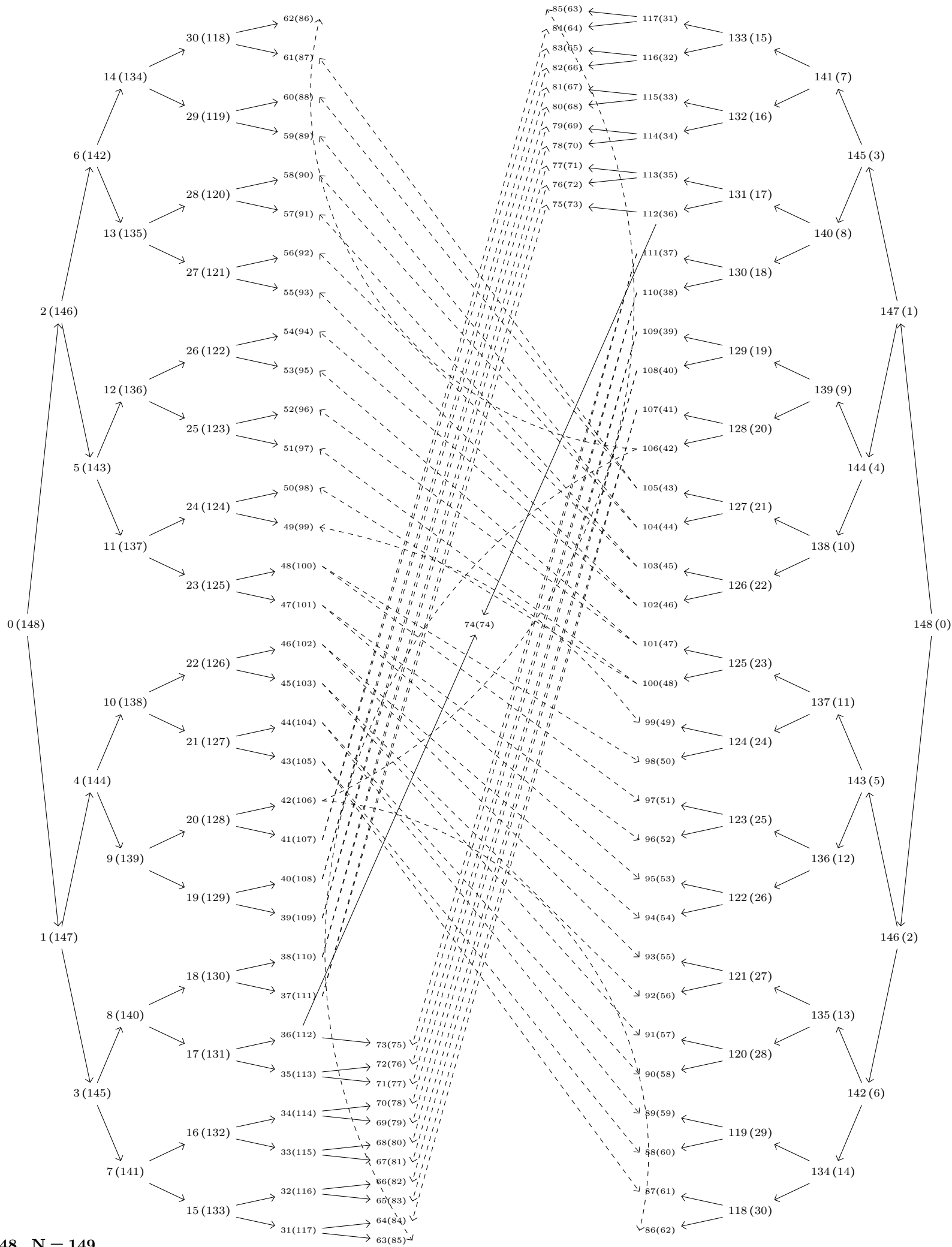
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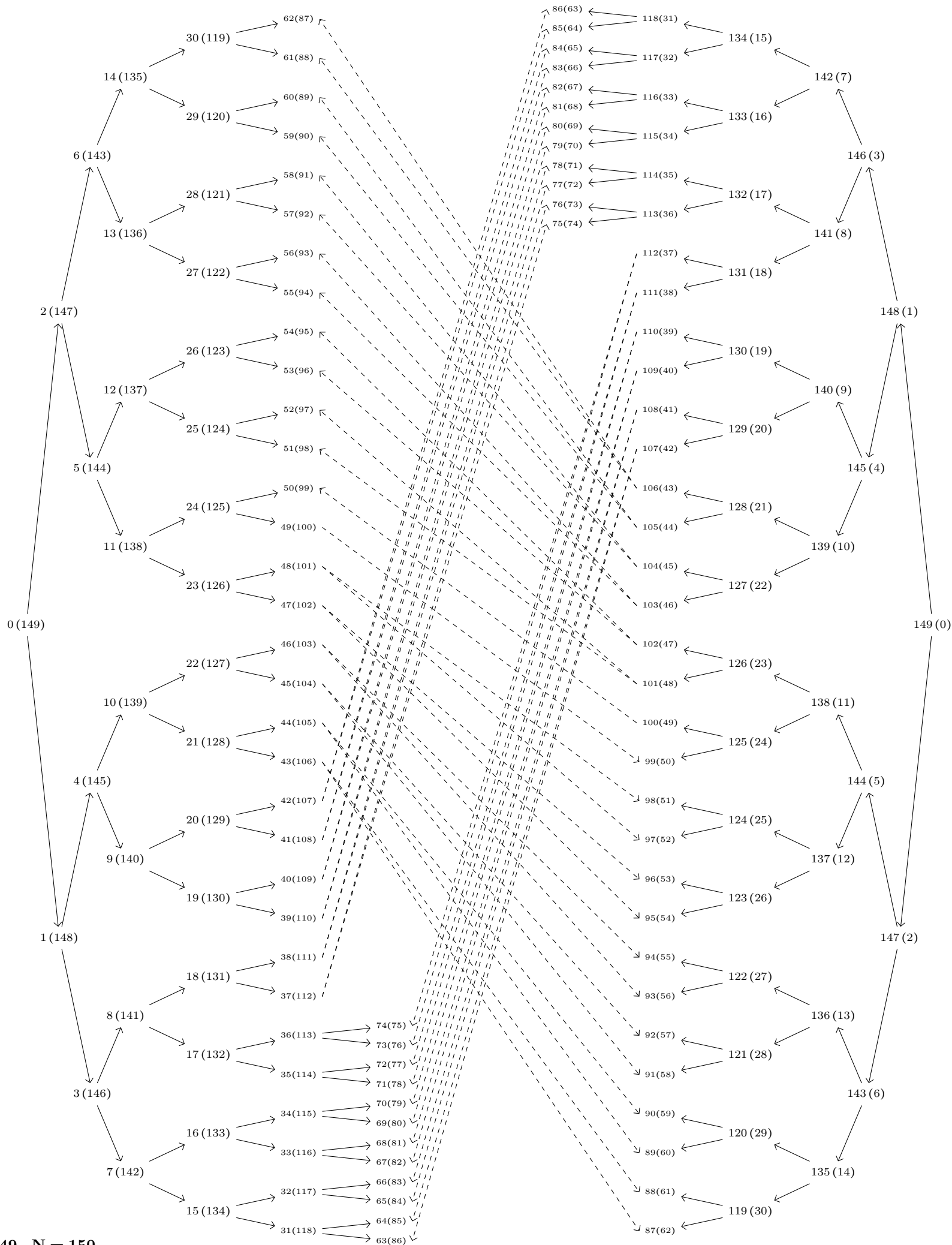


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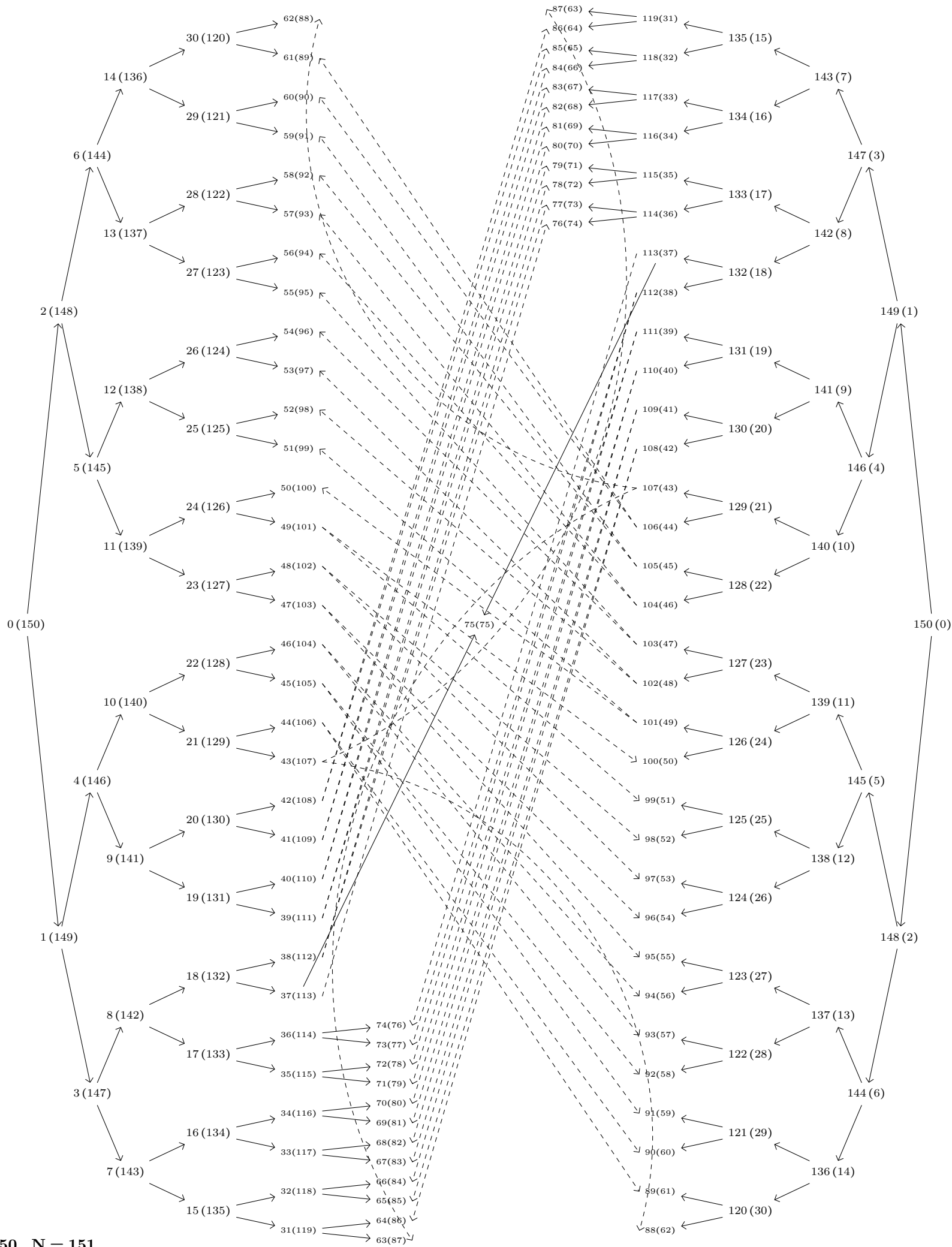




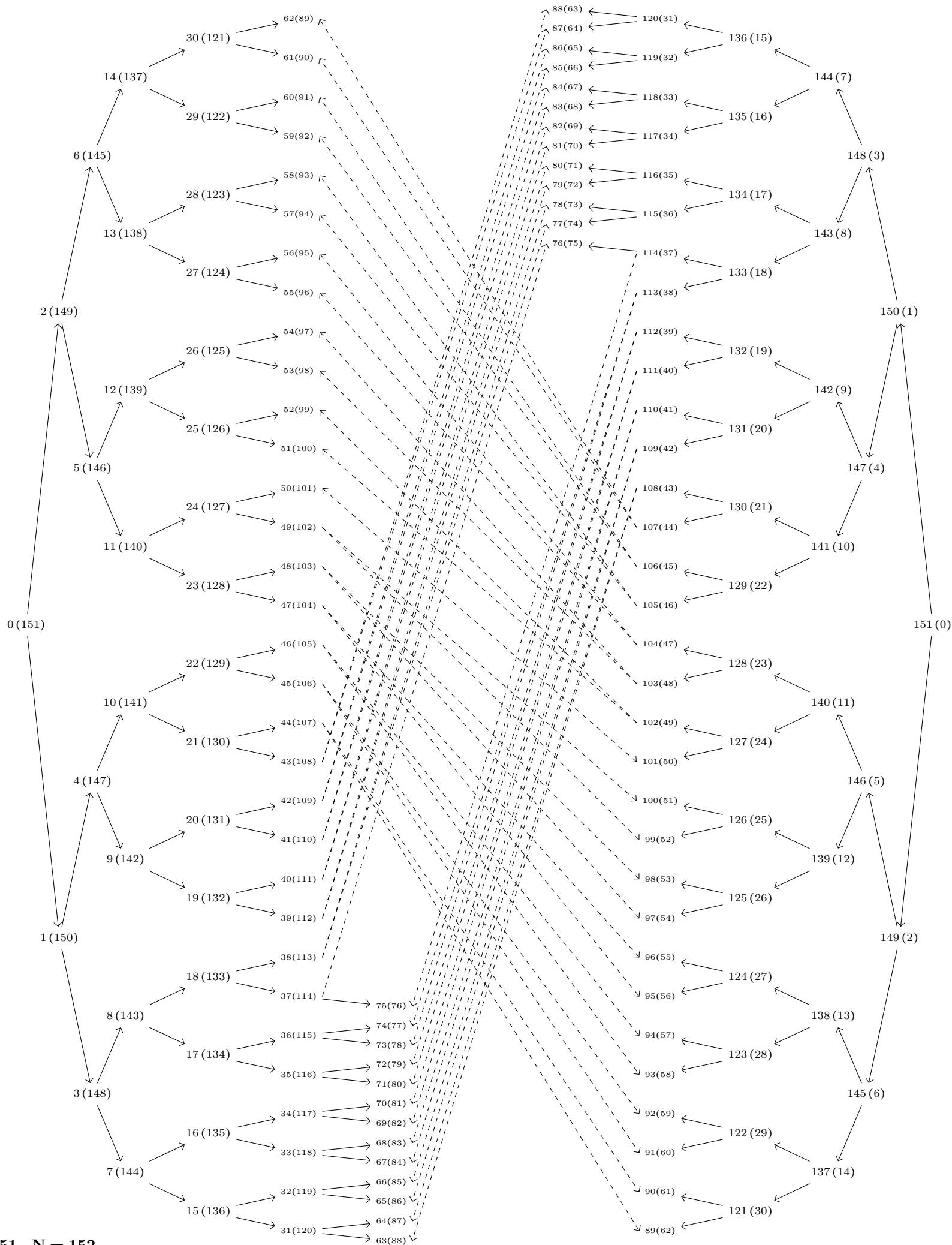
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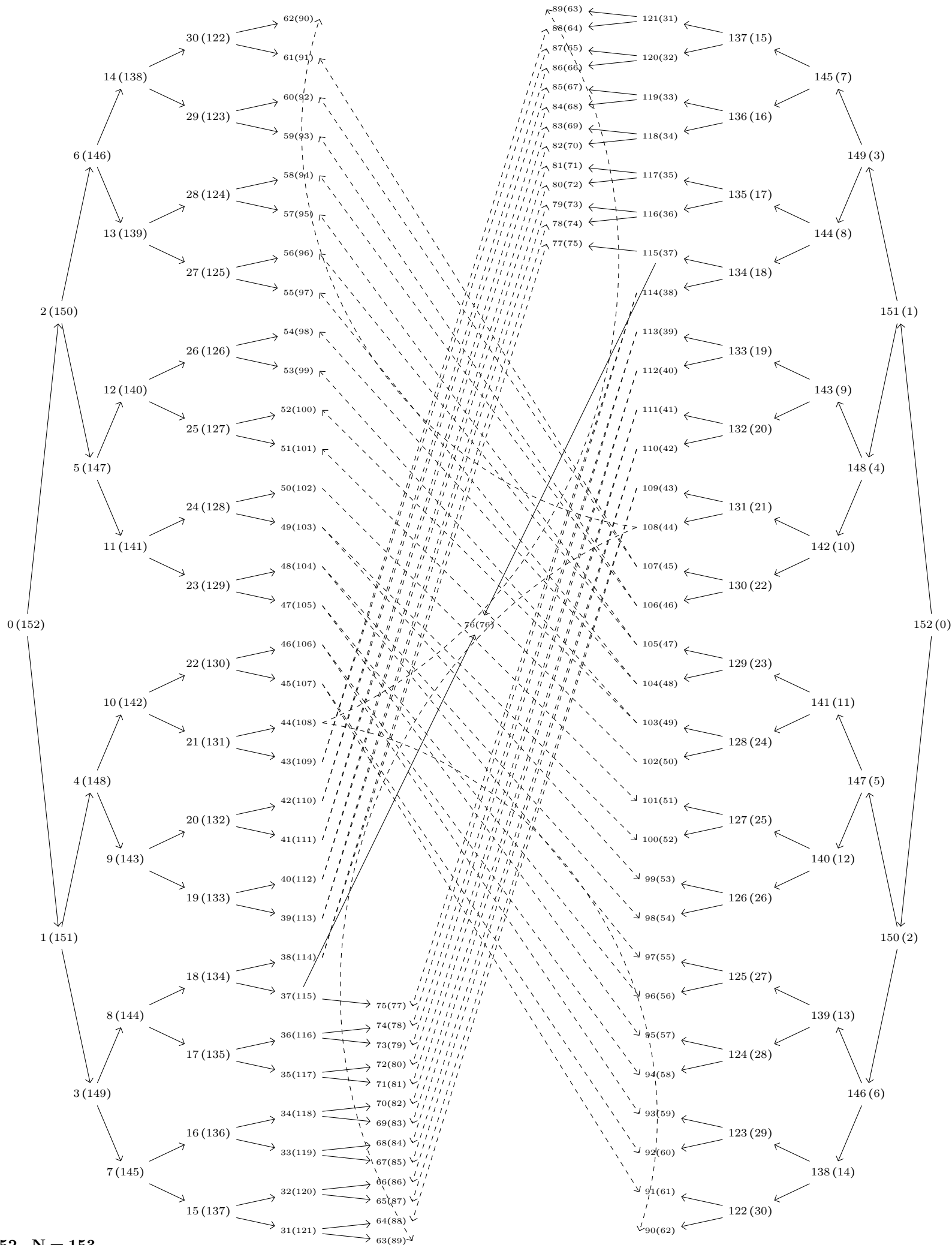


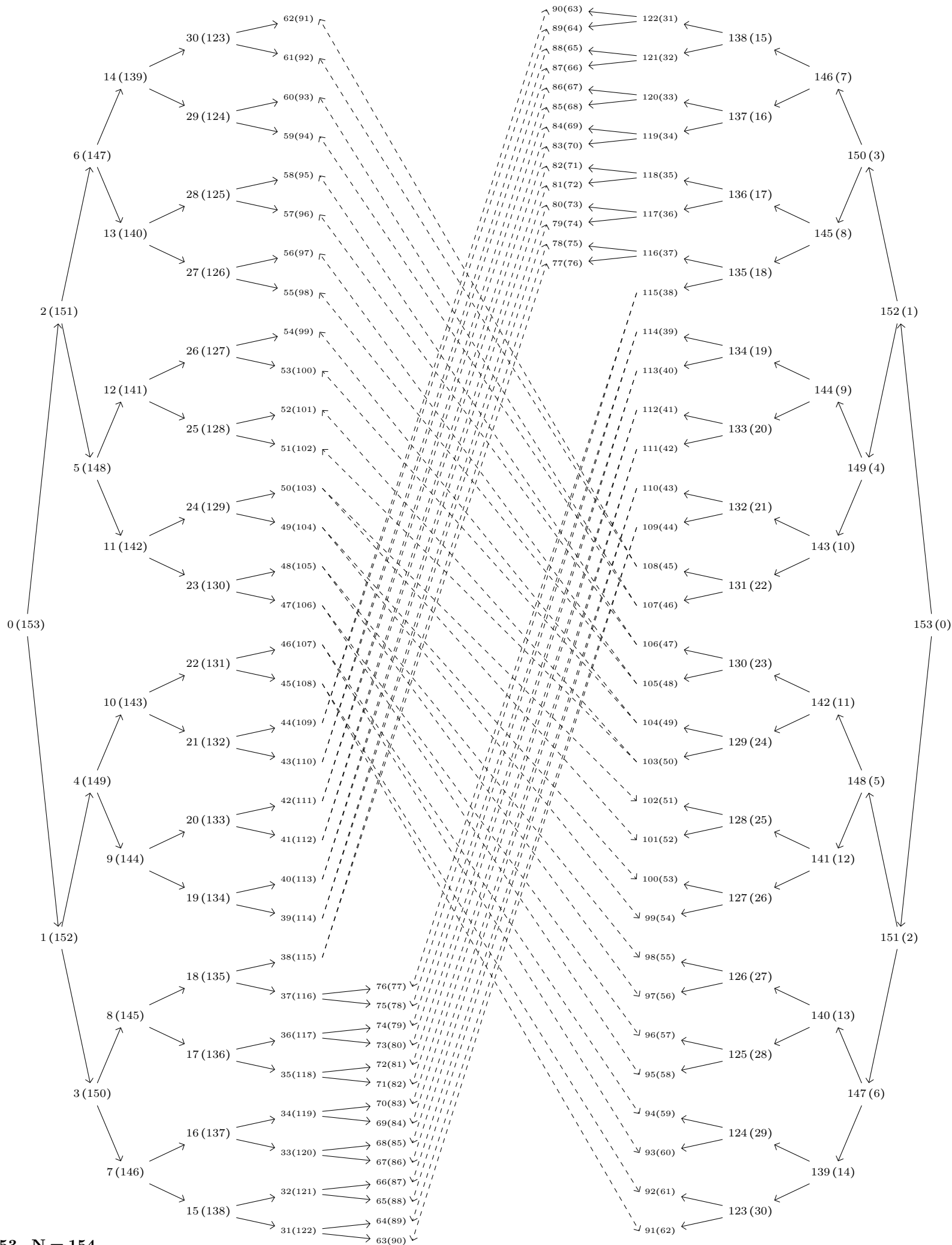
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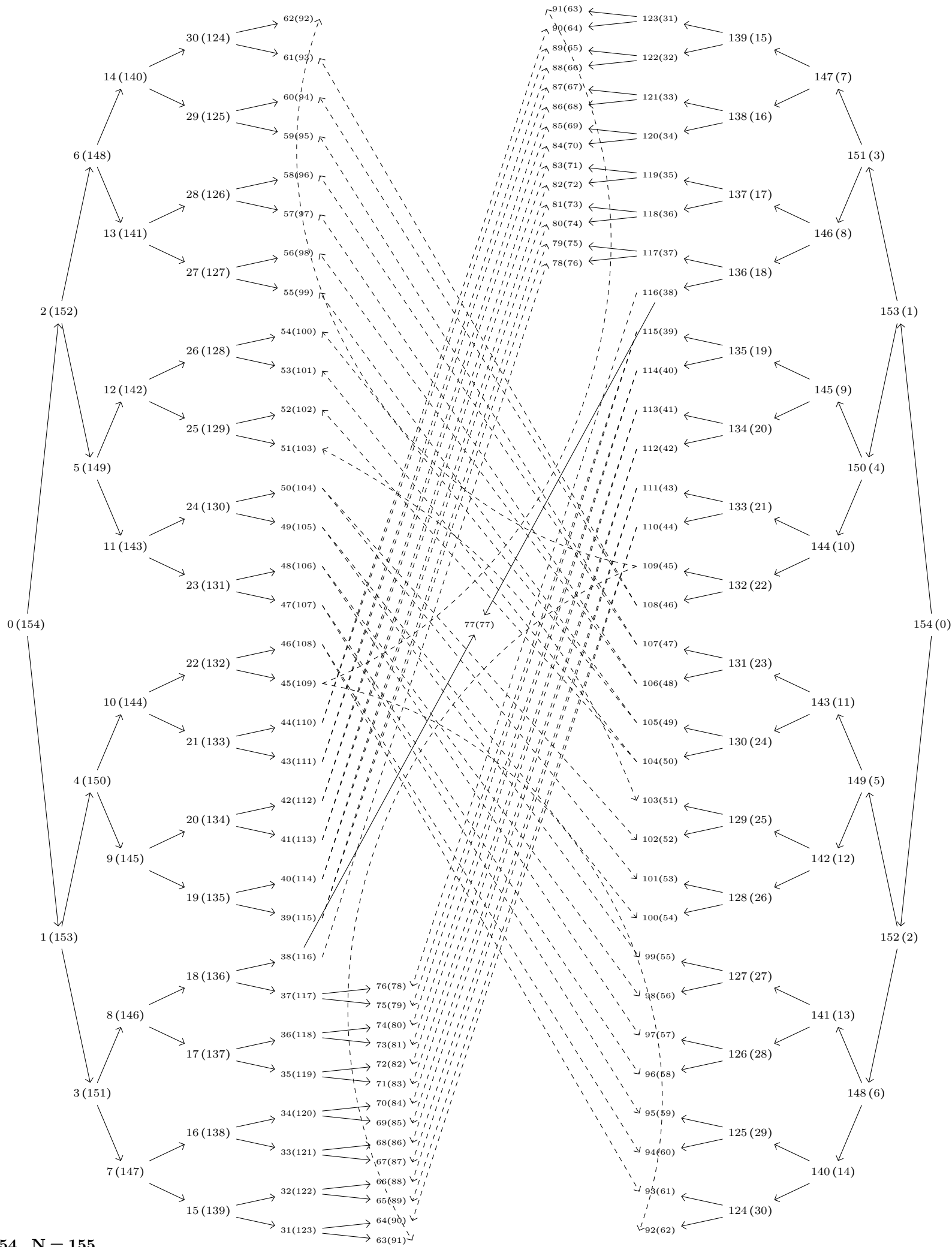
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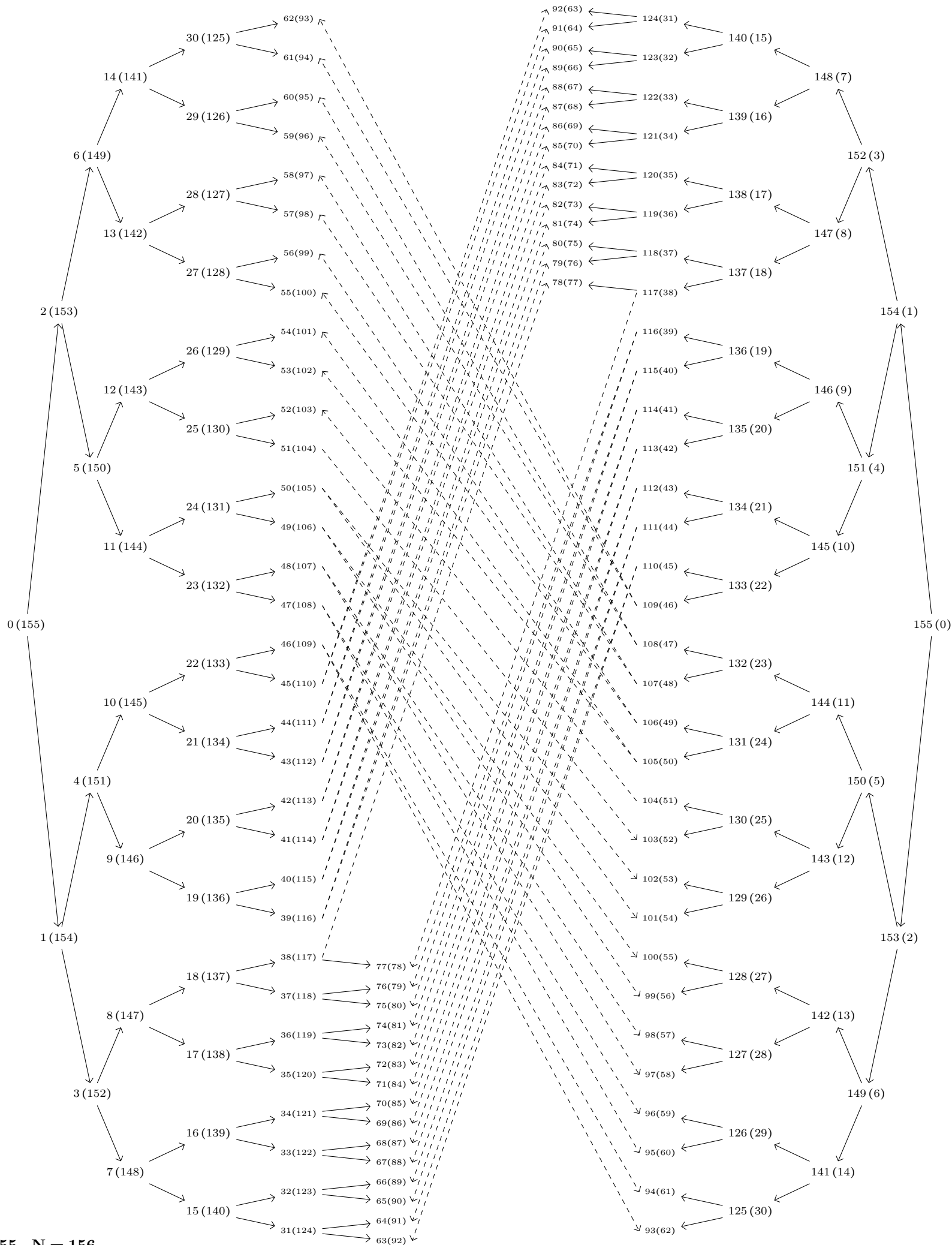


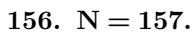


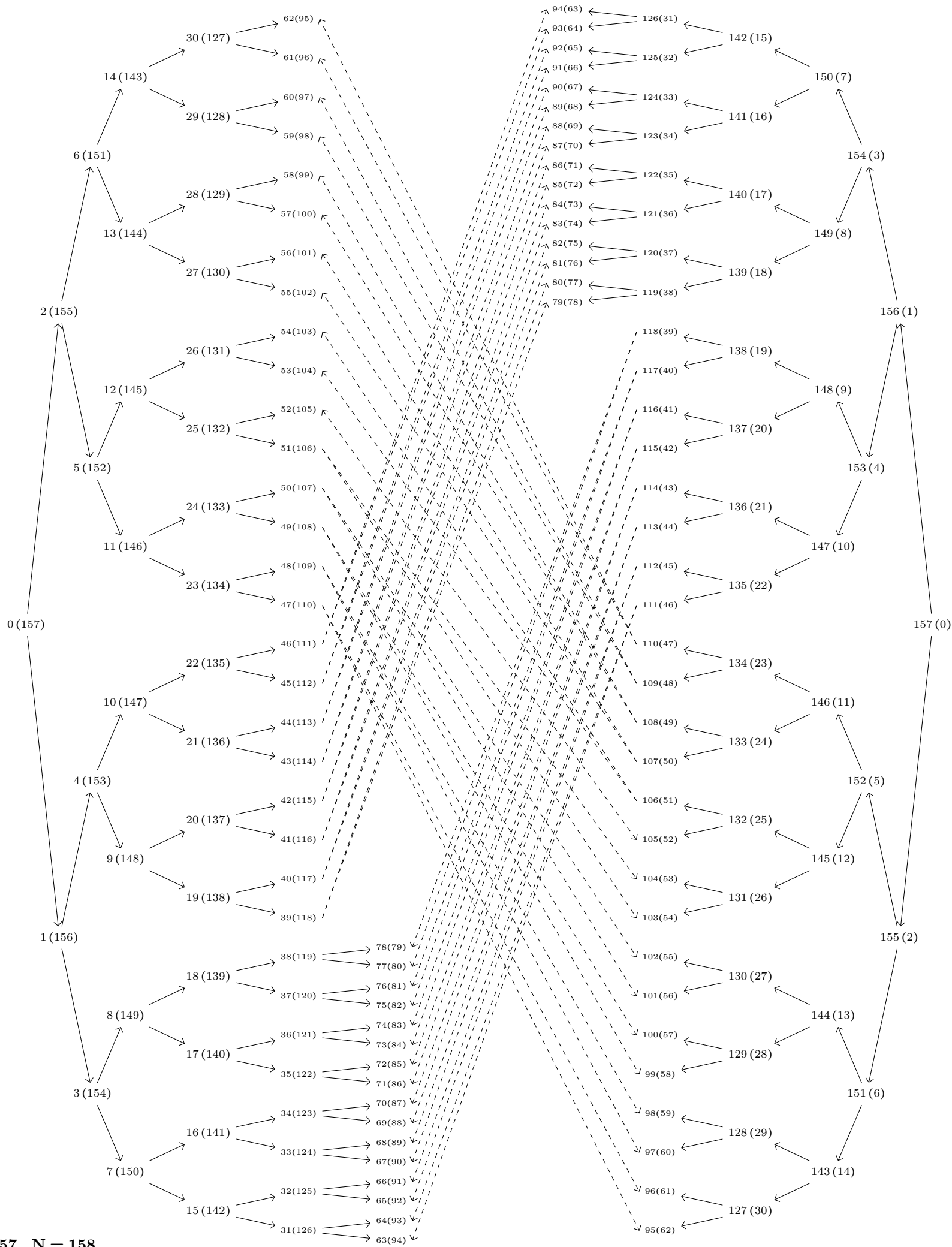
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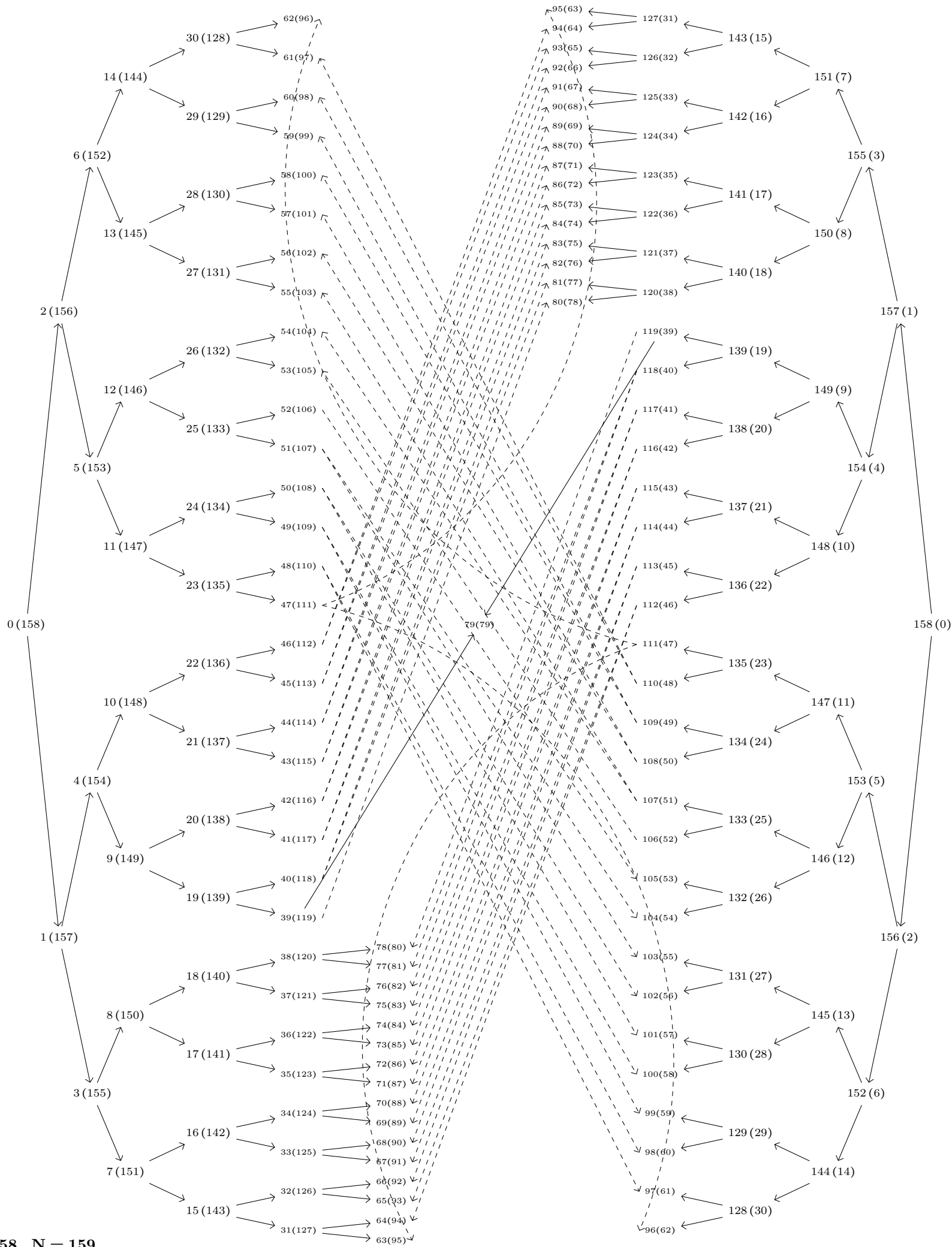
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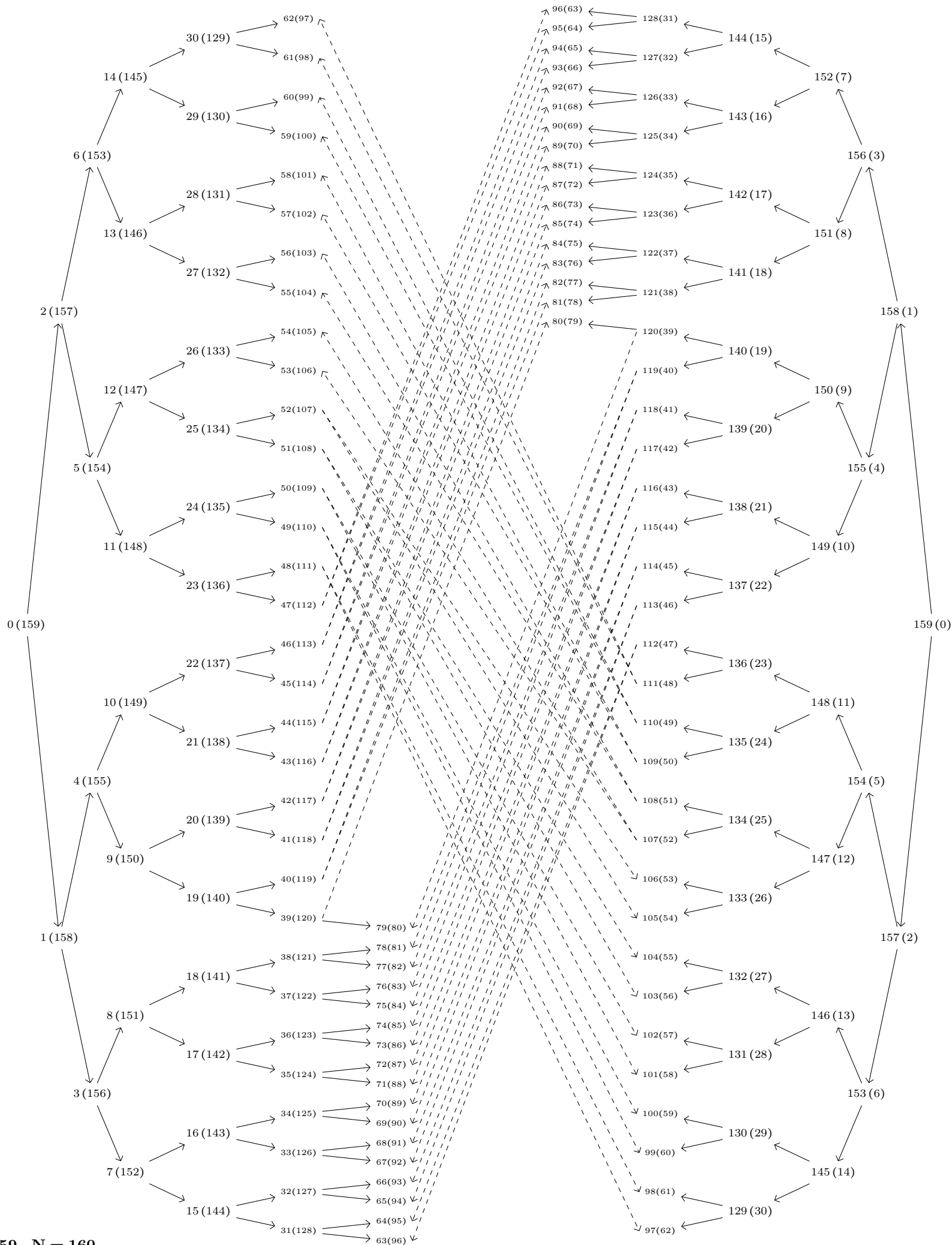


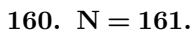


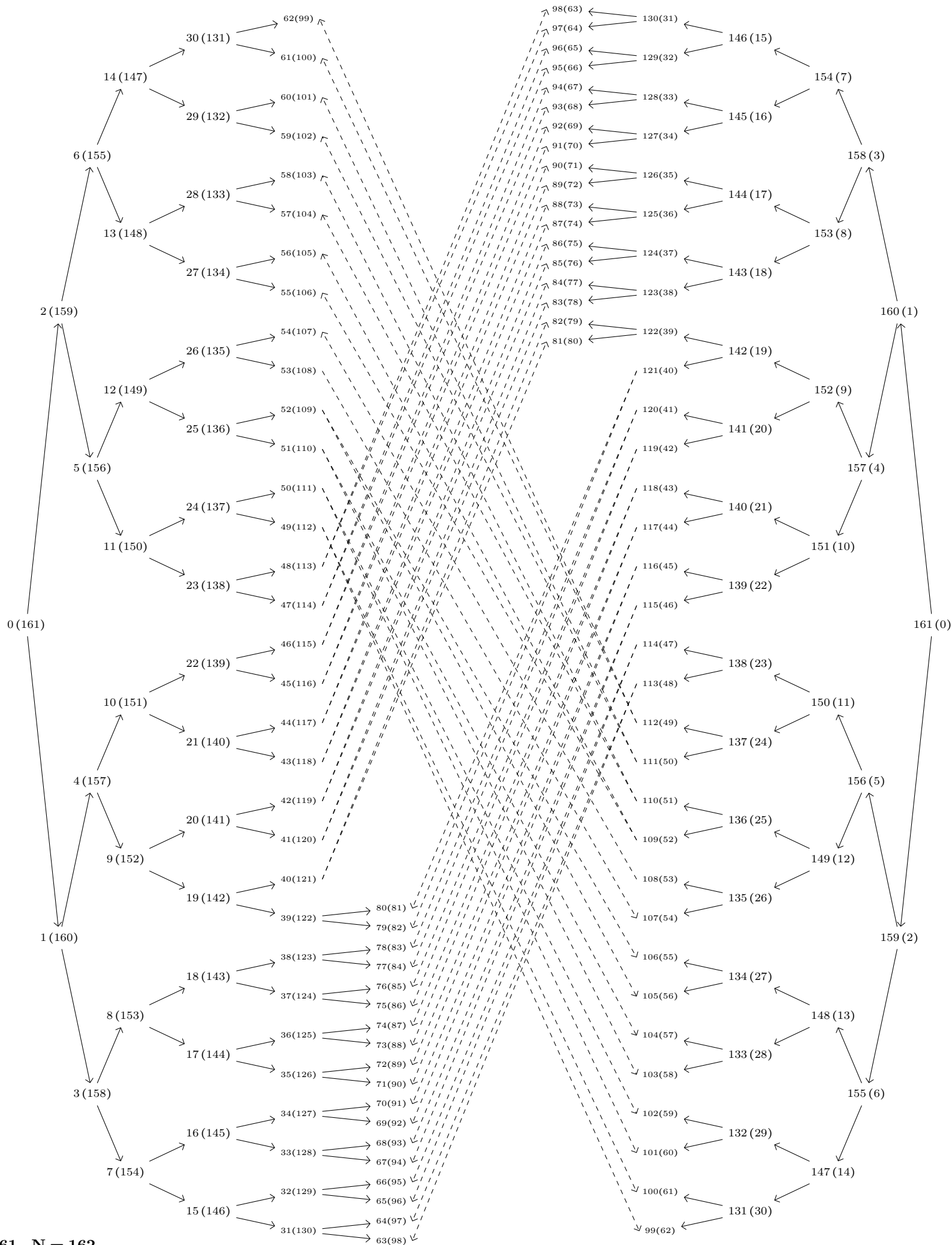


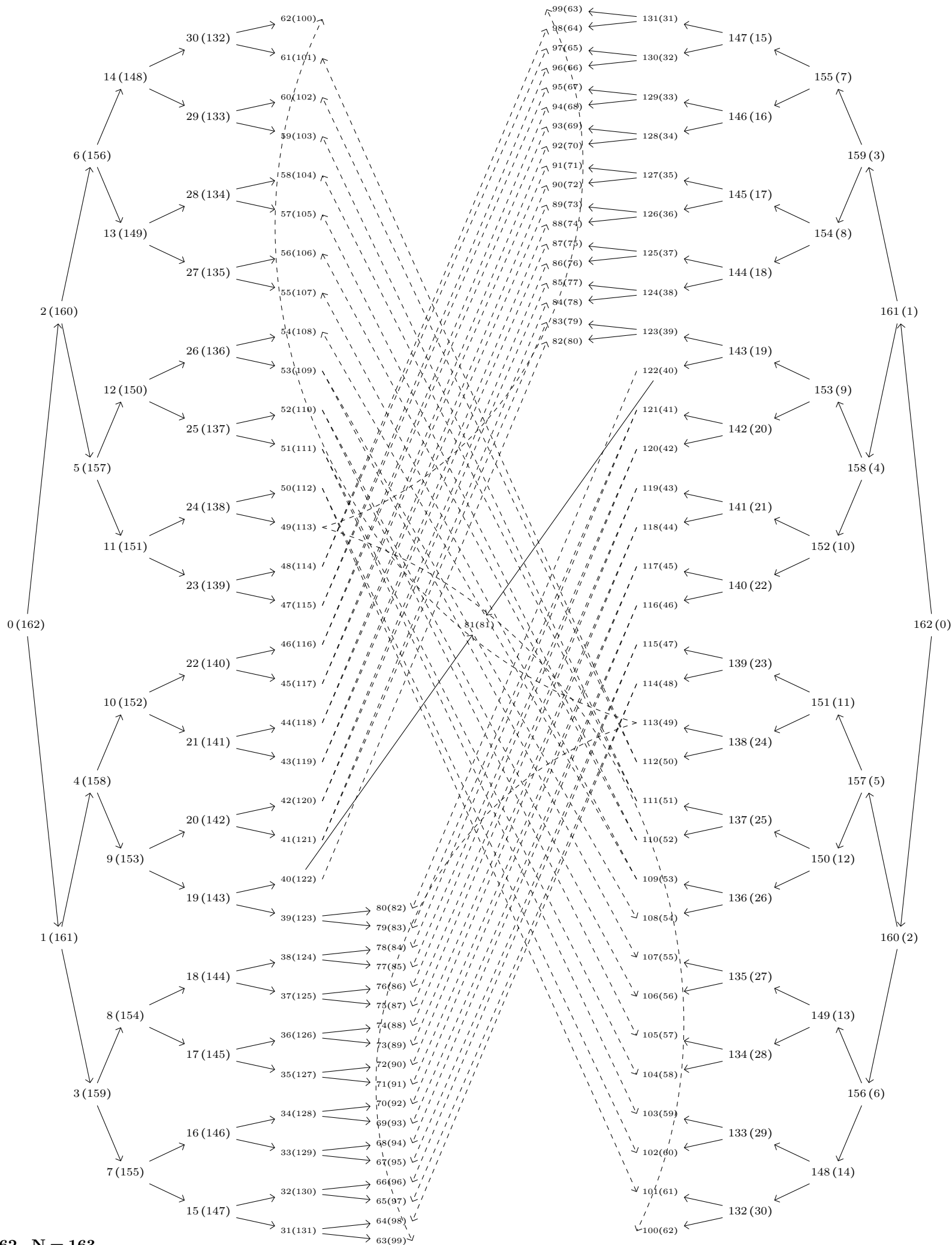
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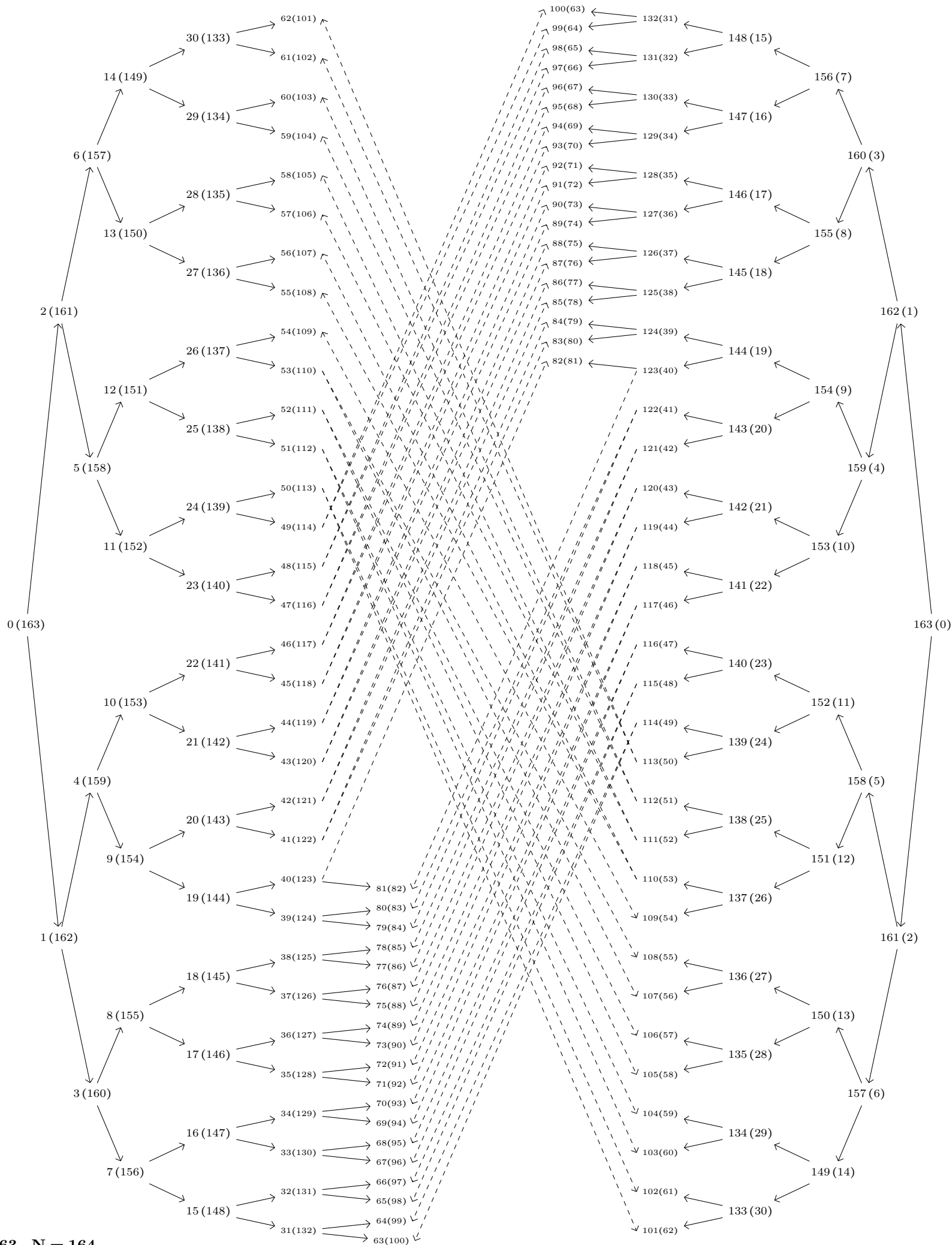




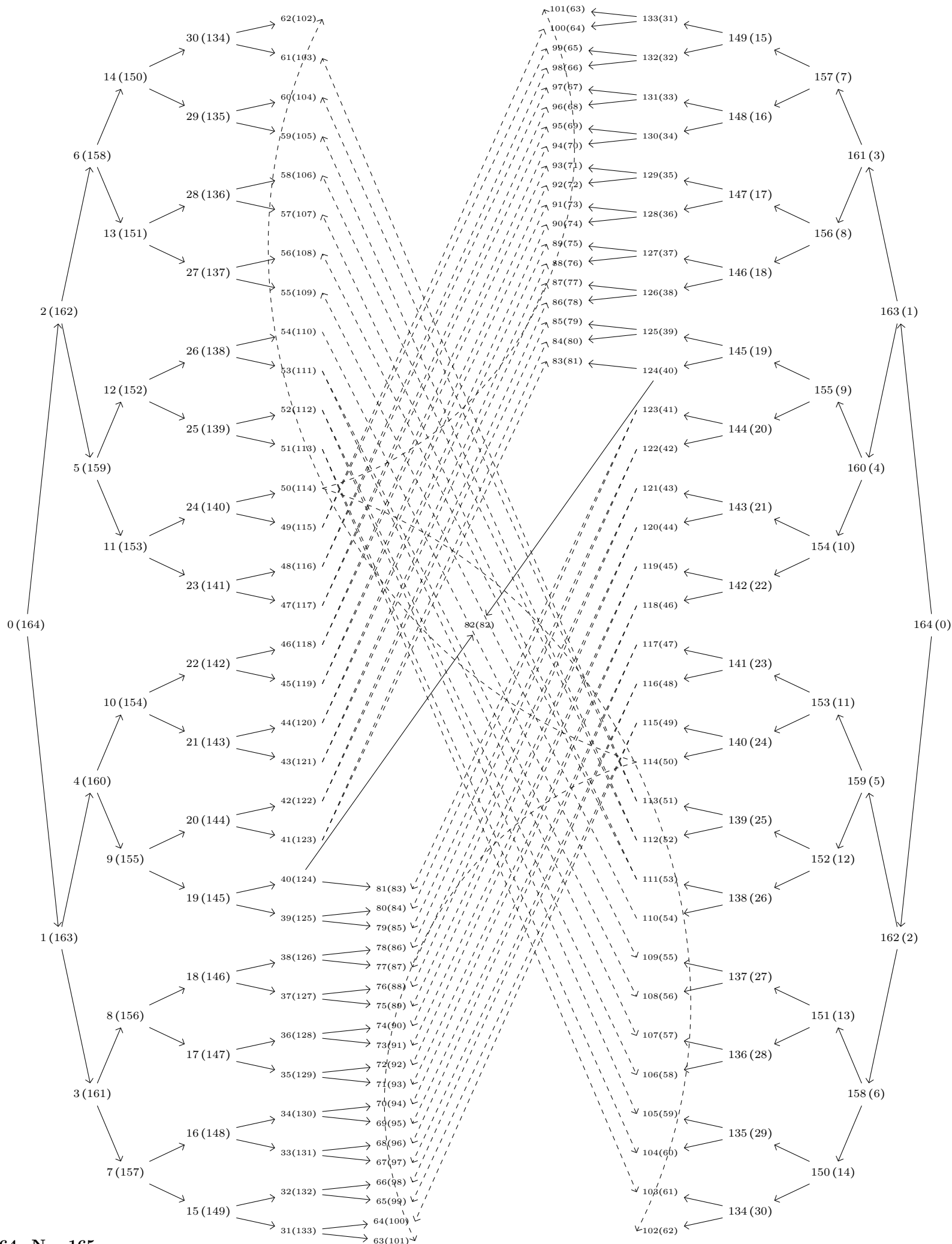




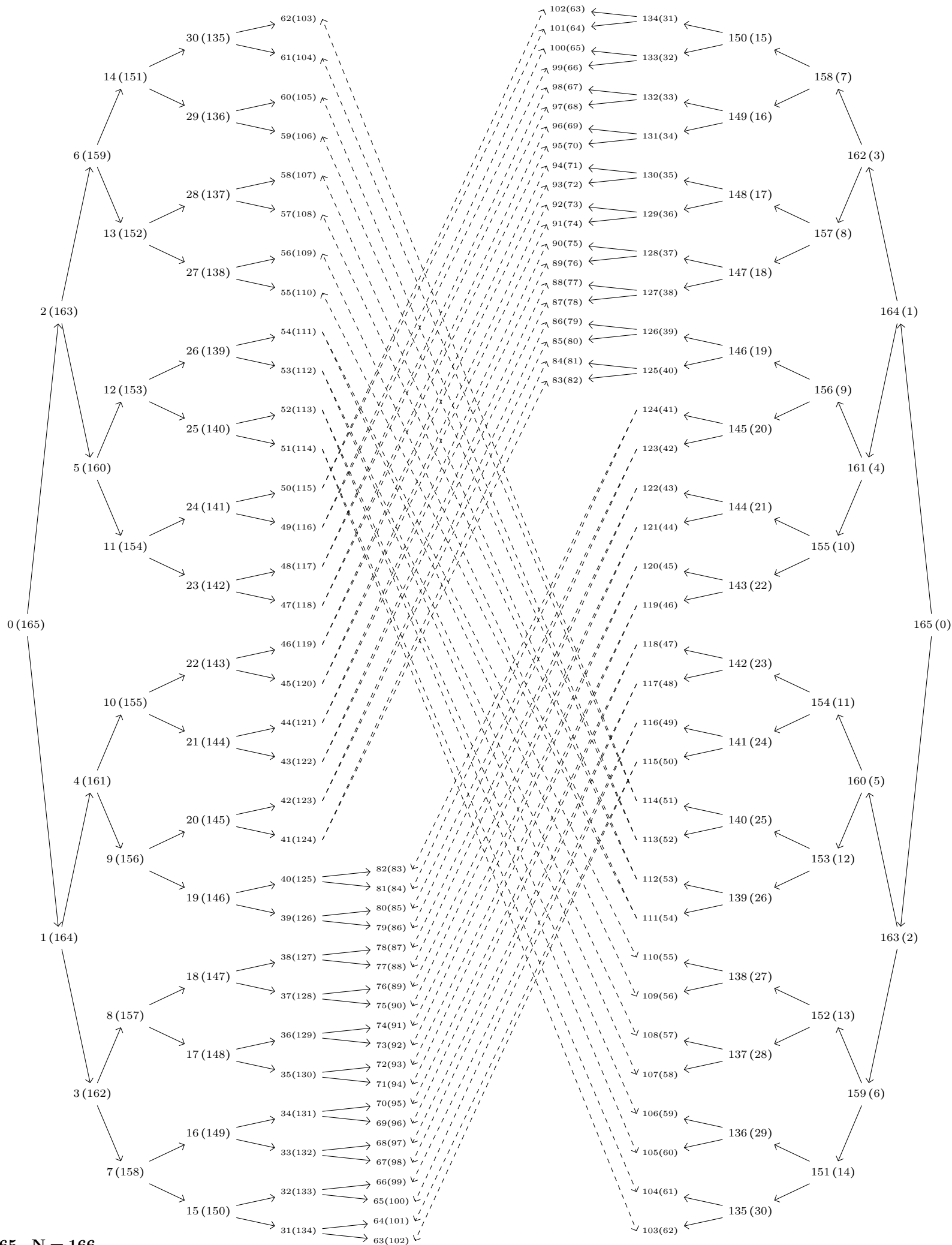


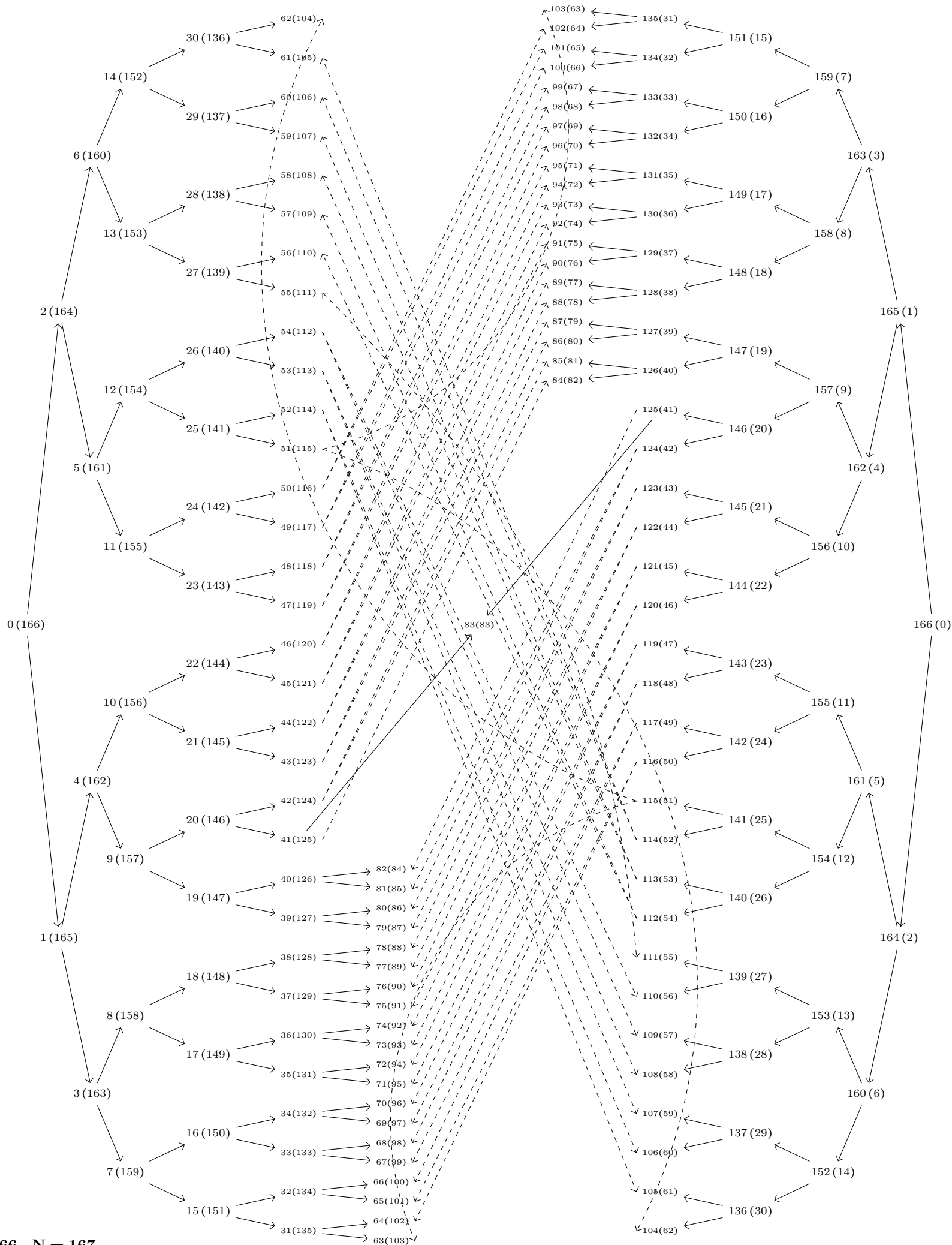


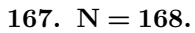
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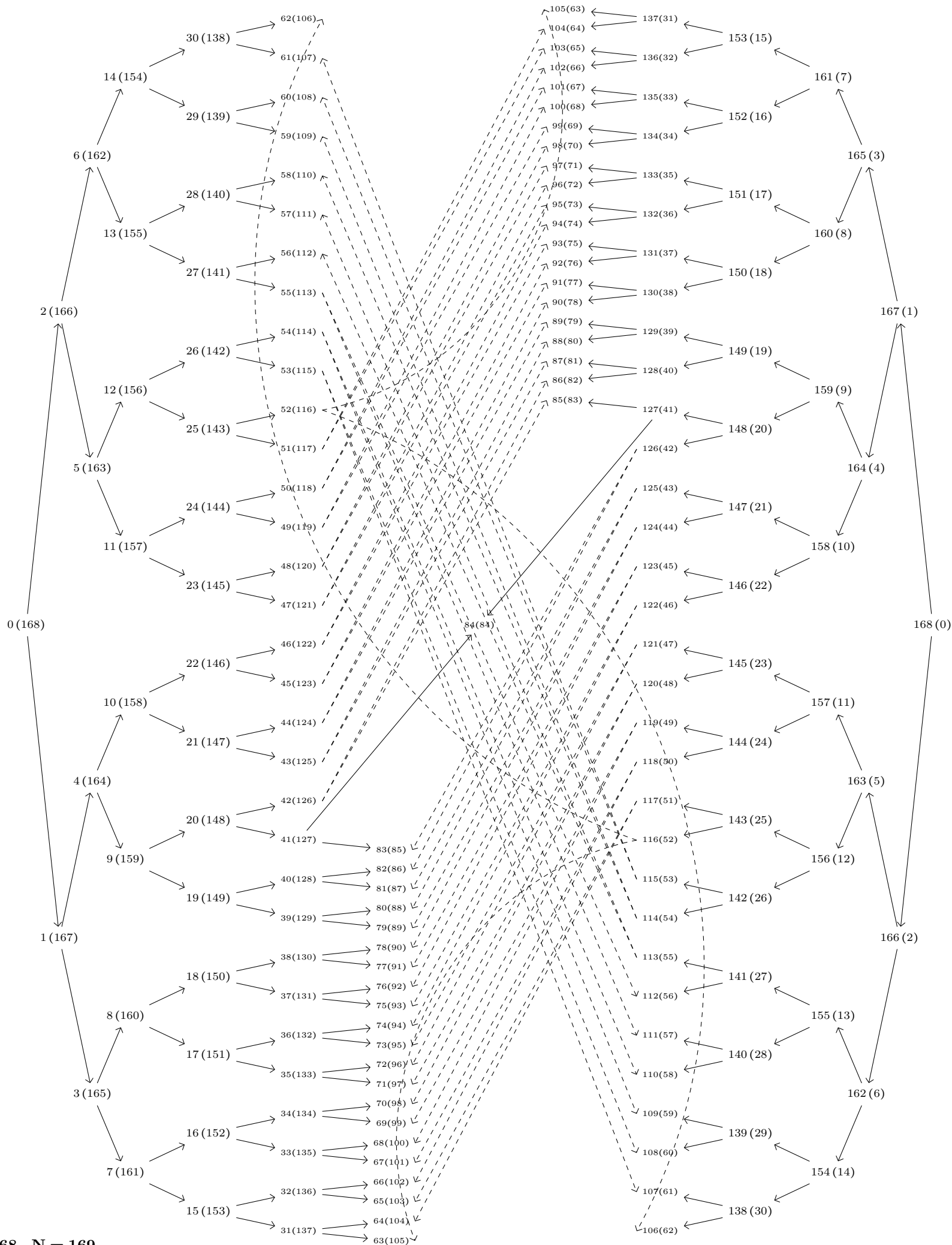


164. N = 165.

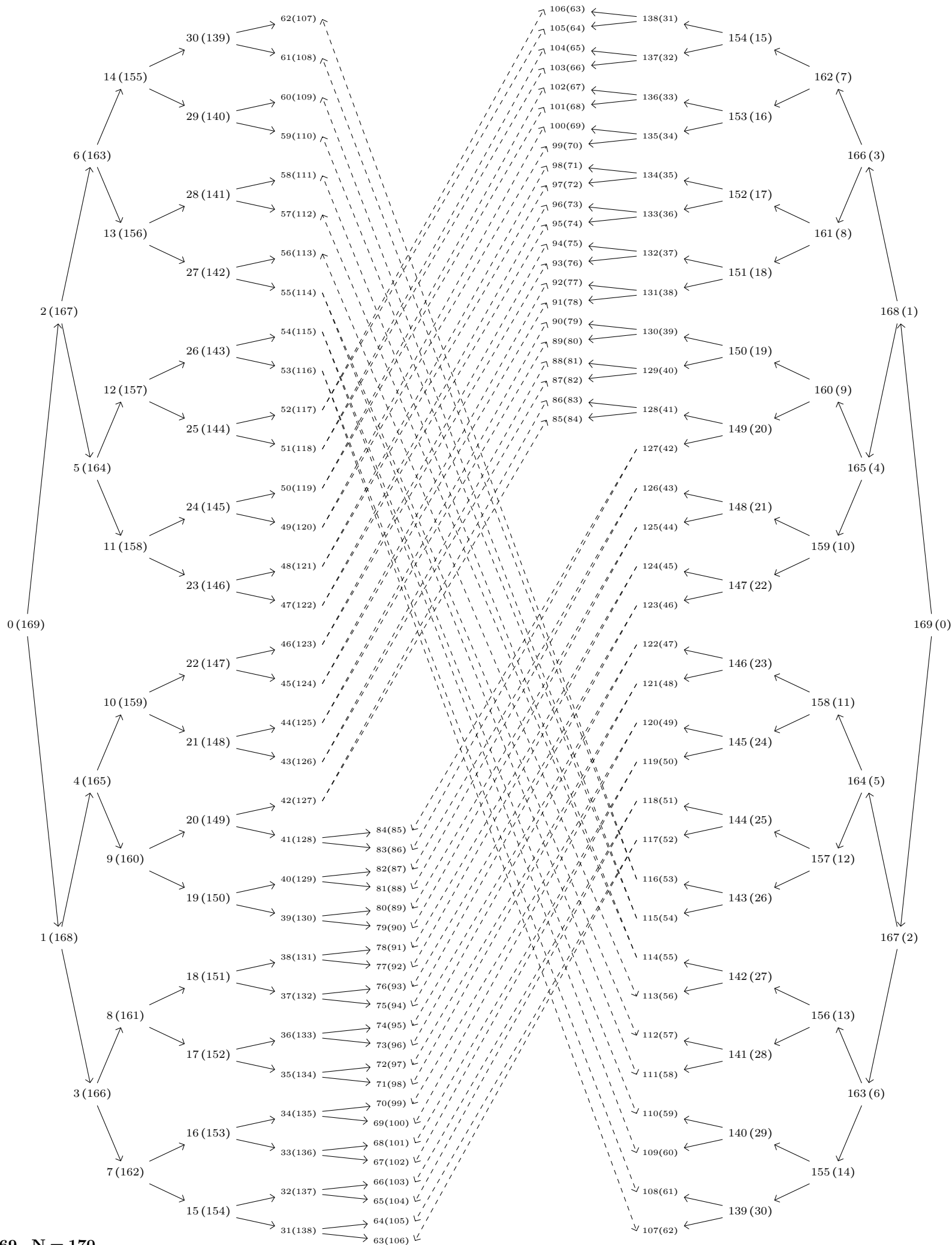


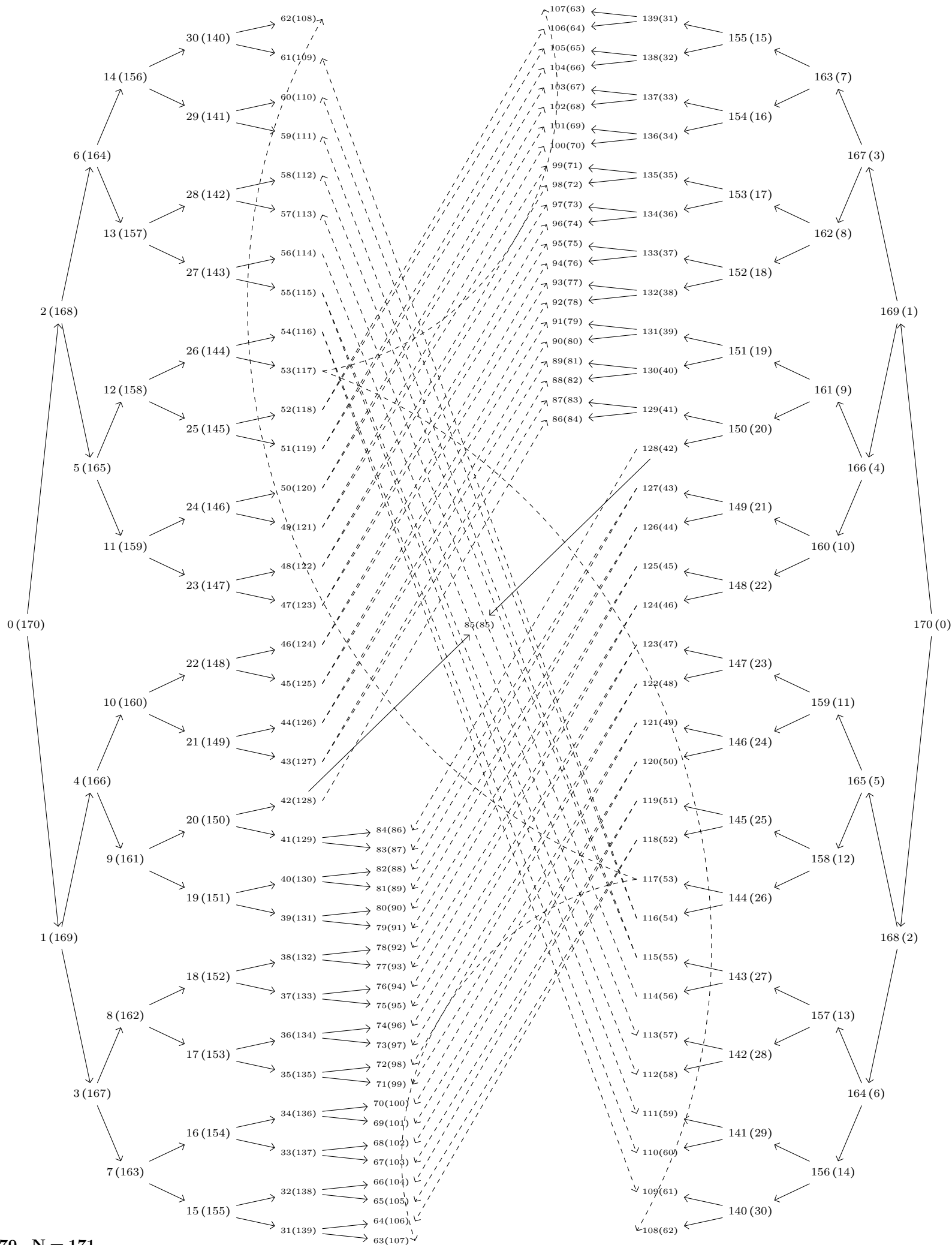




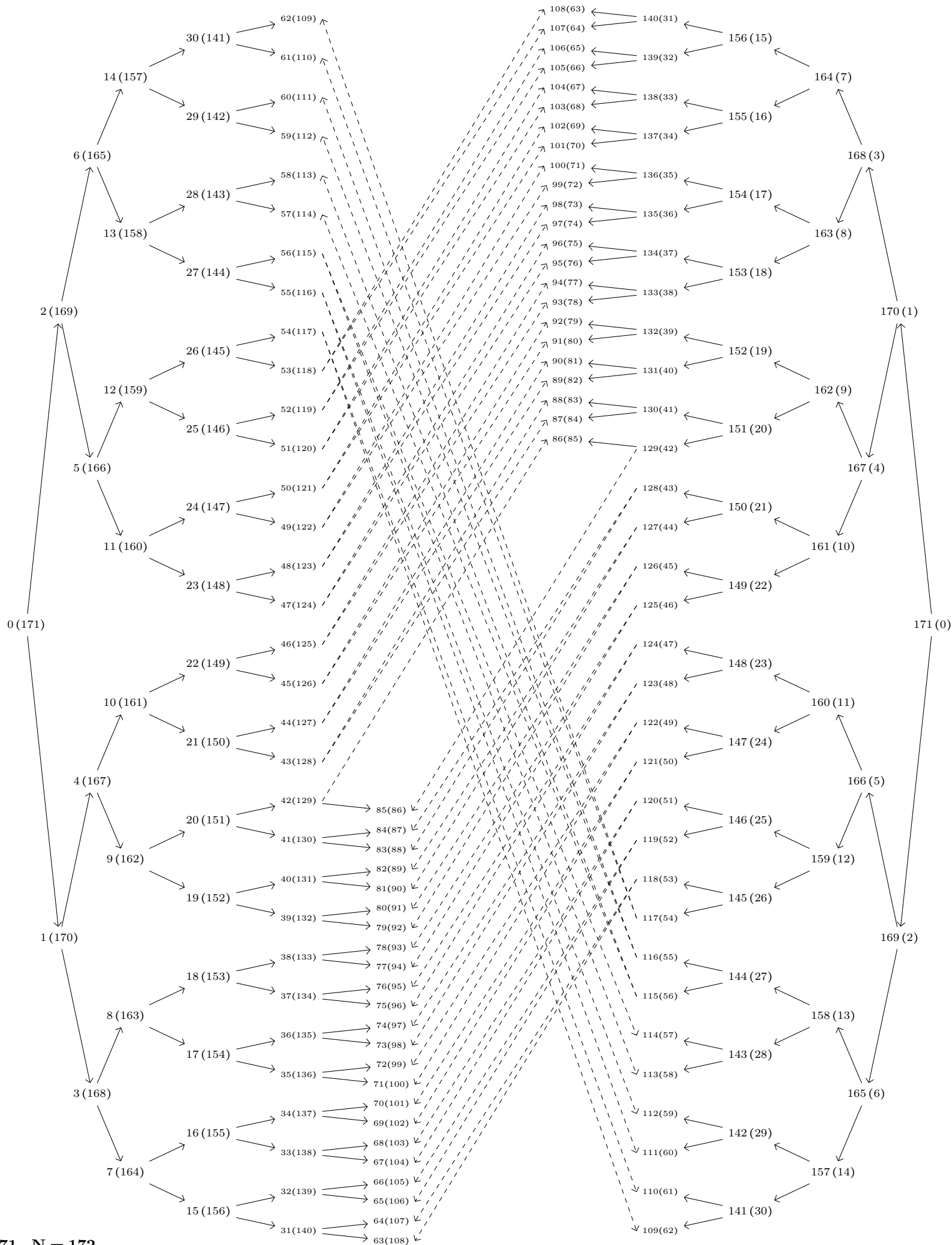


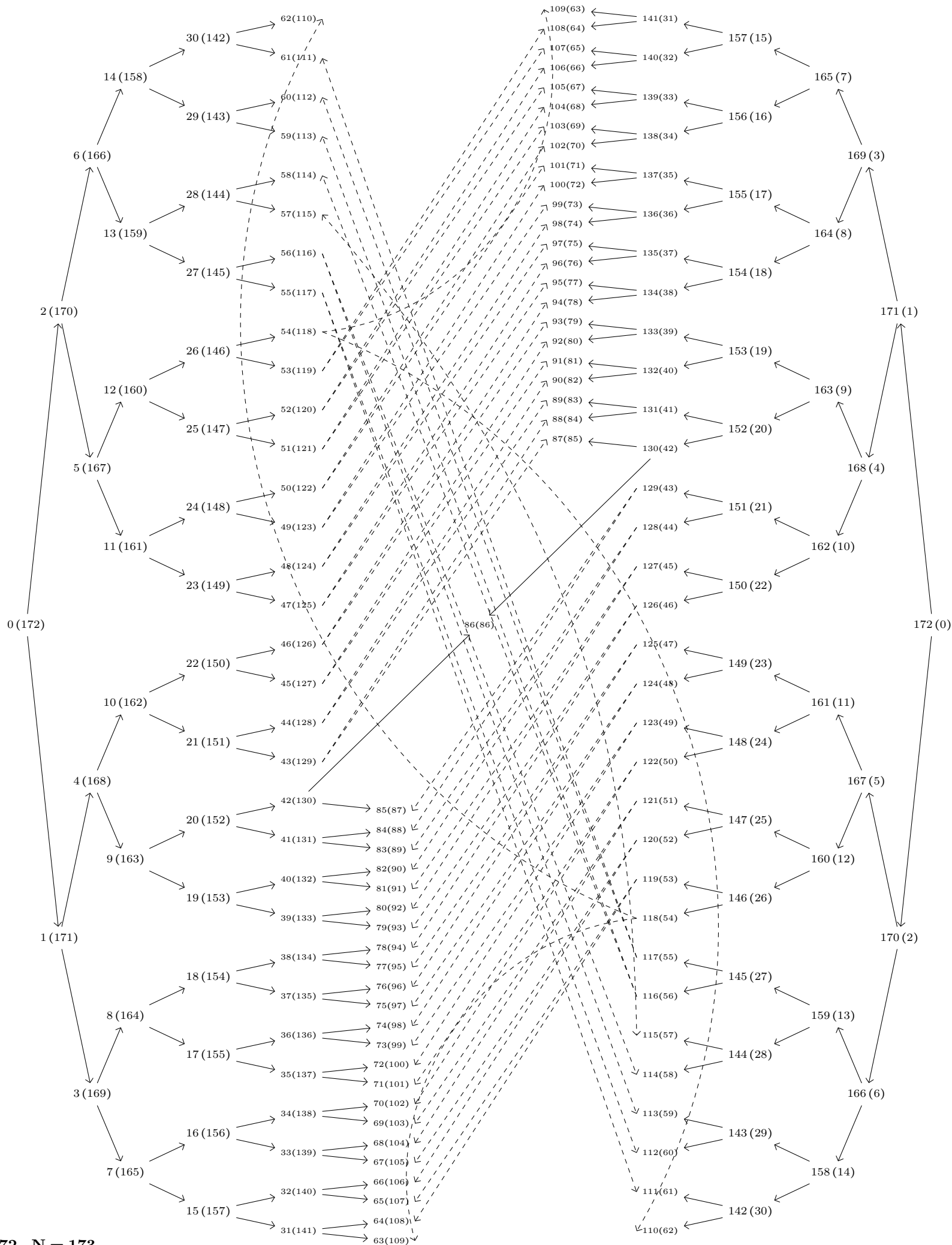
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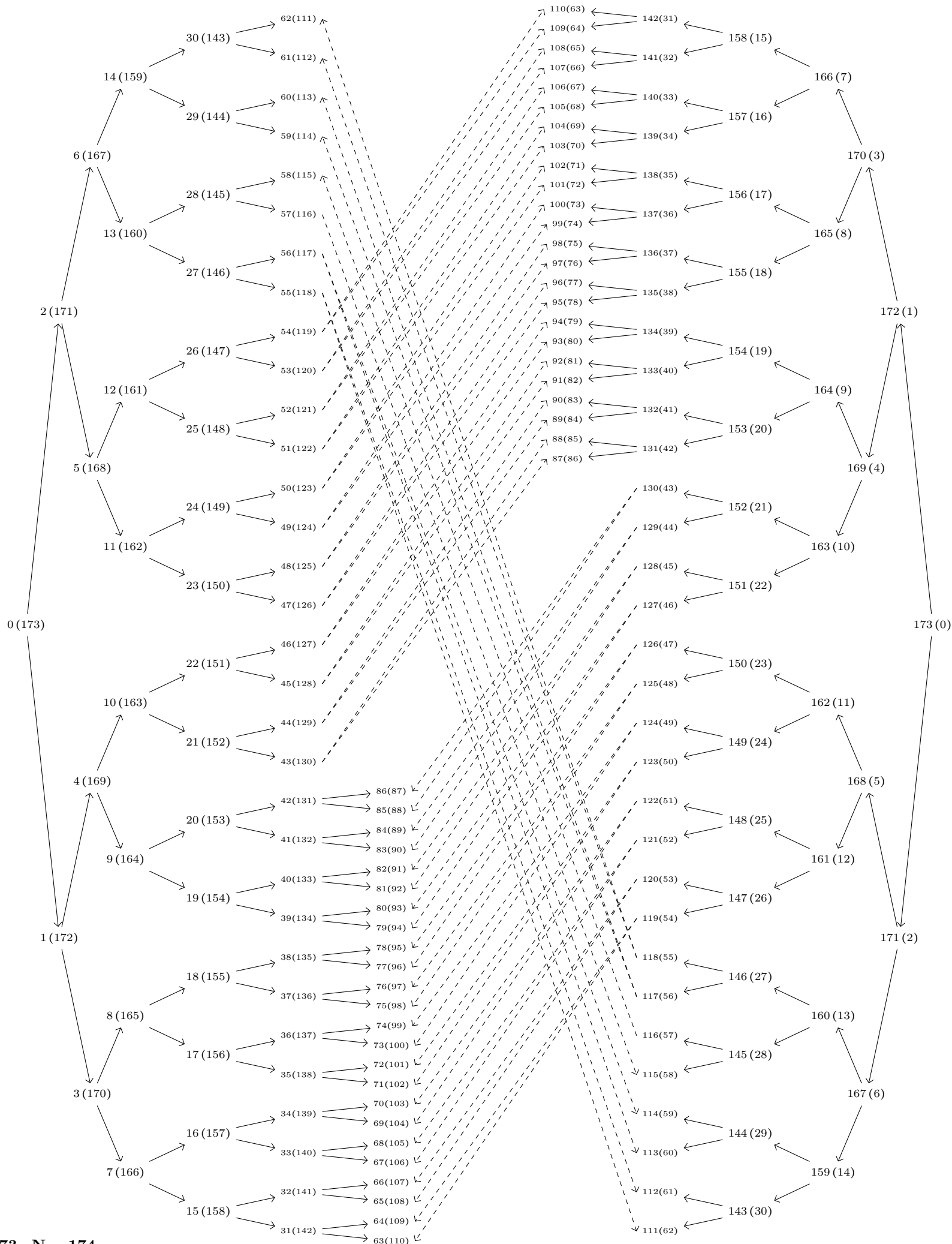


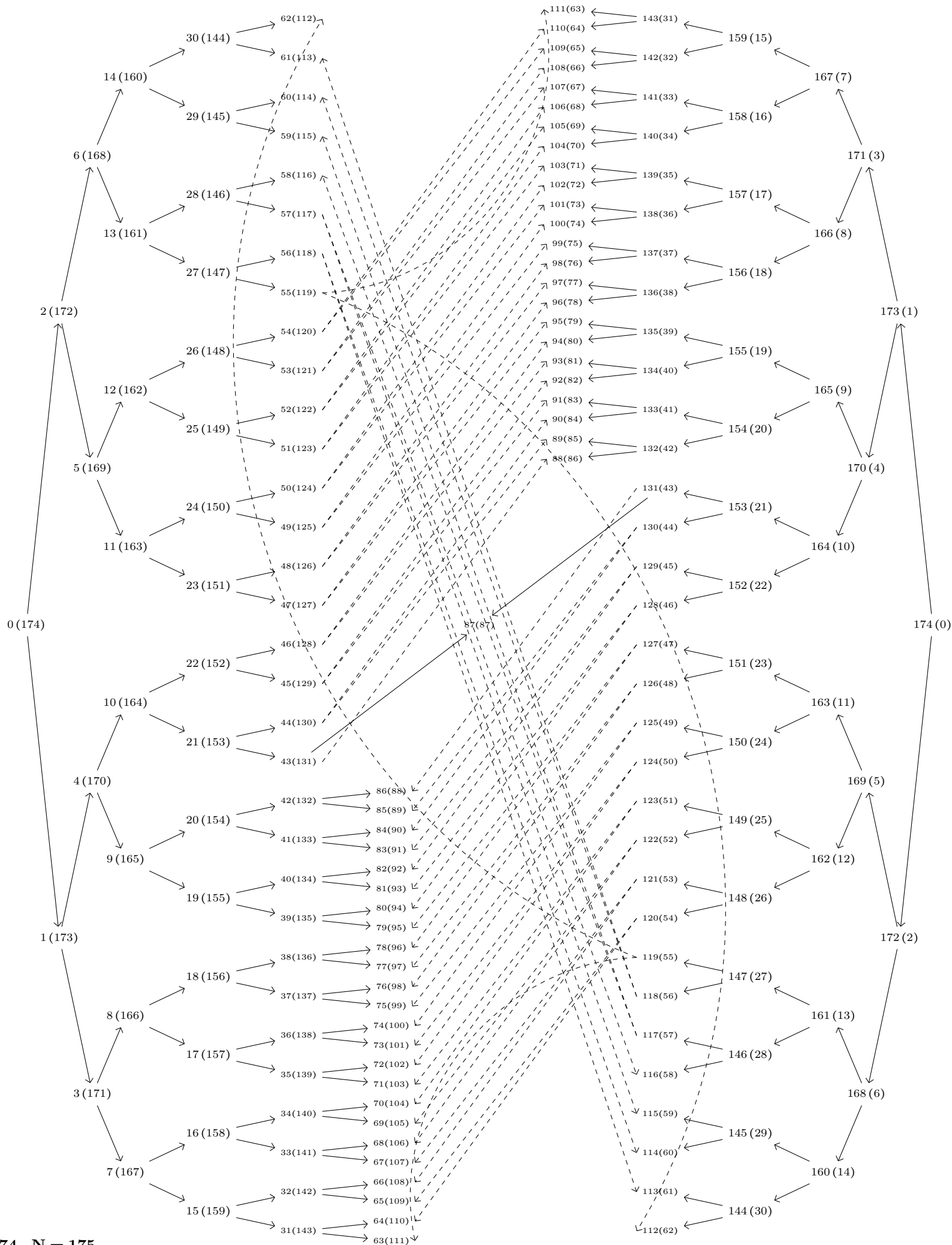


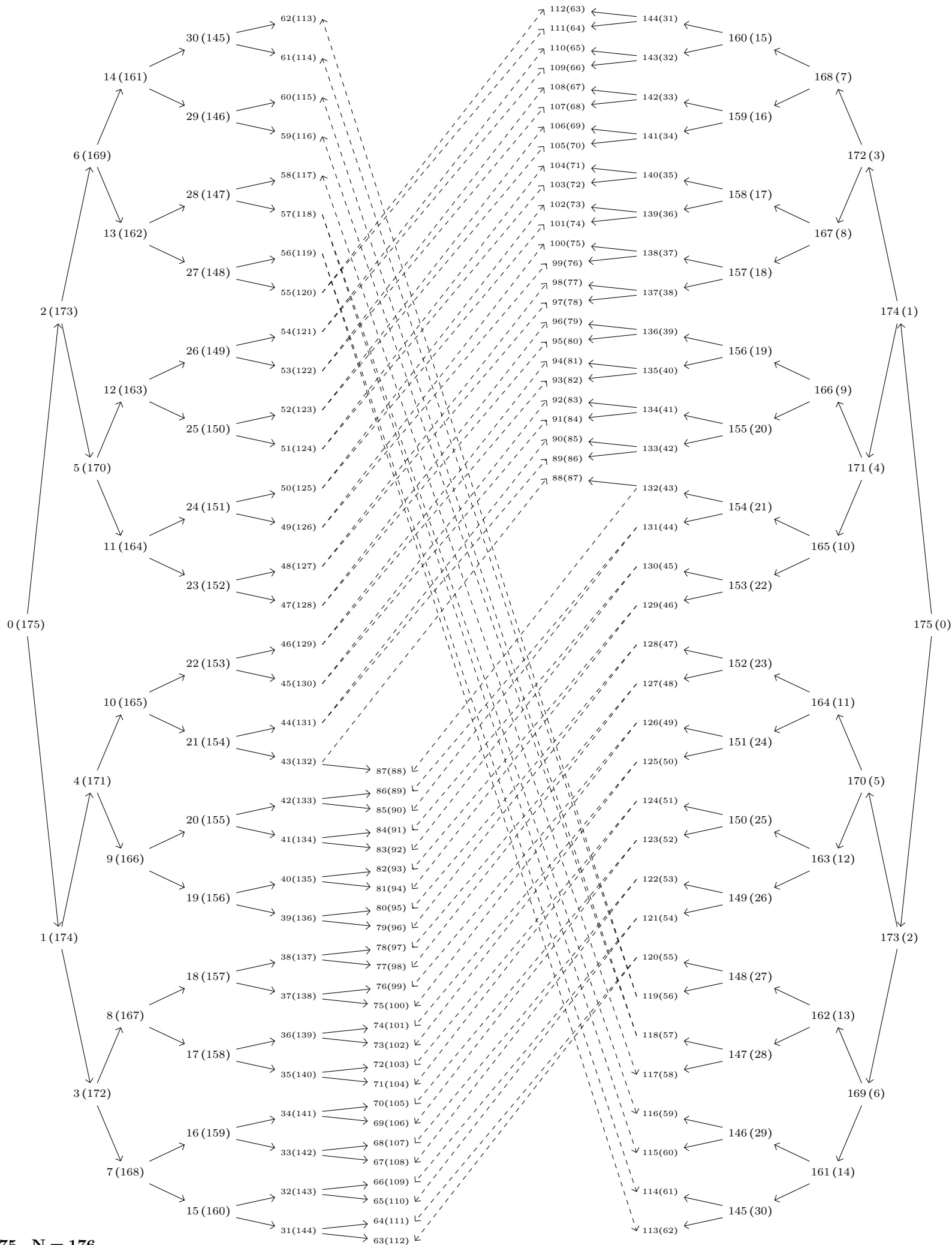
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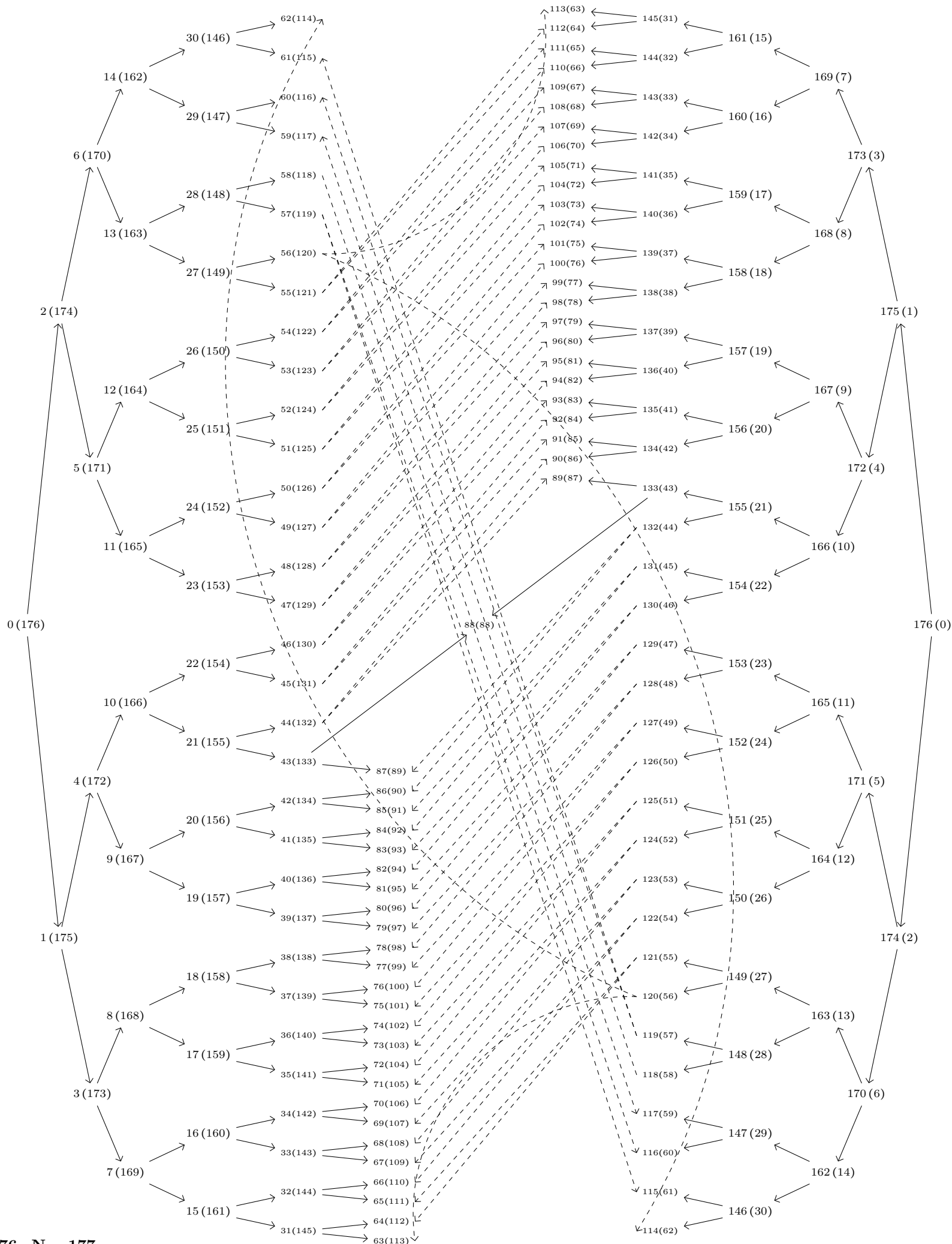


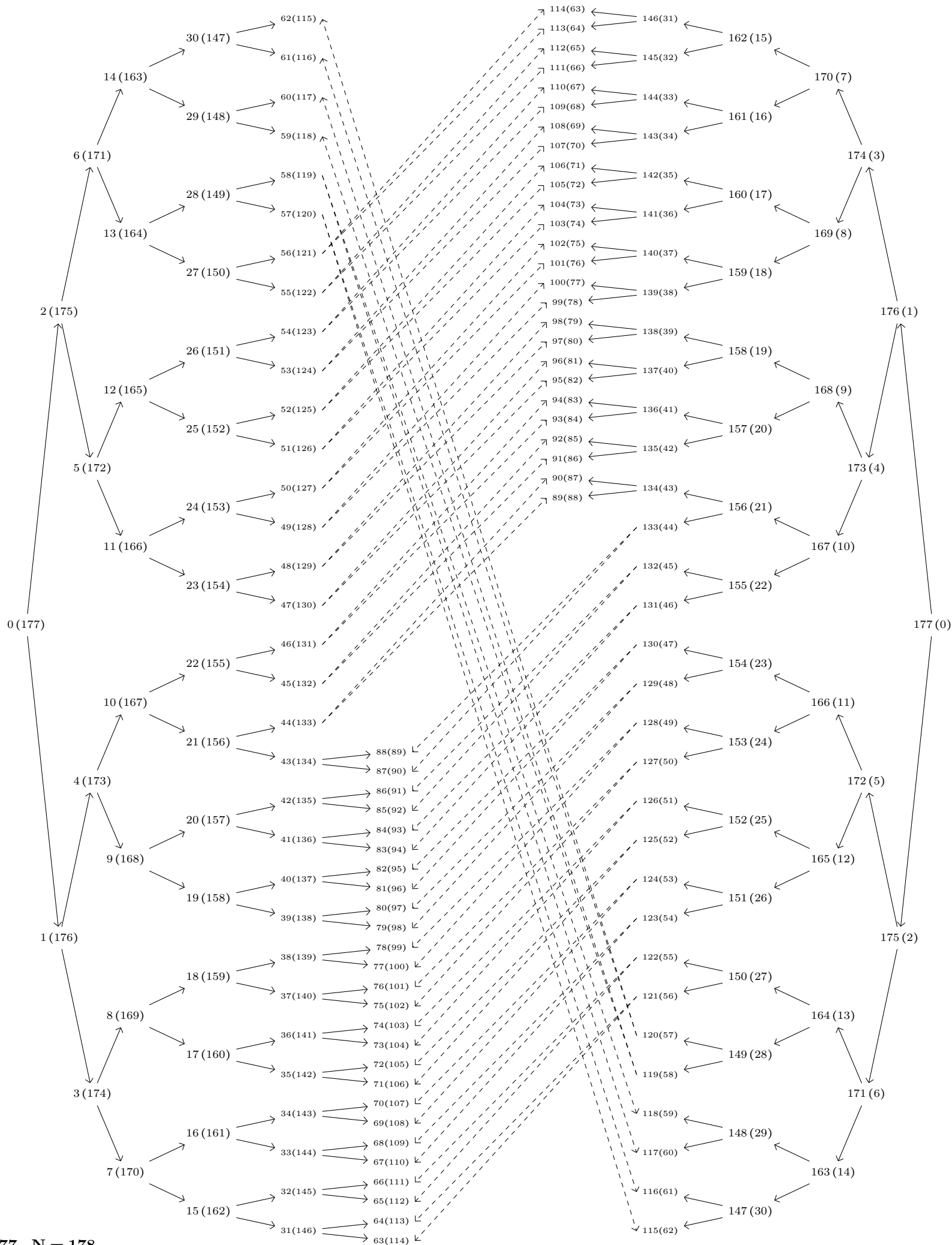


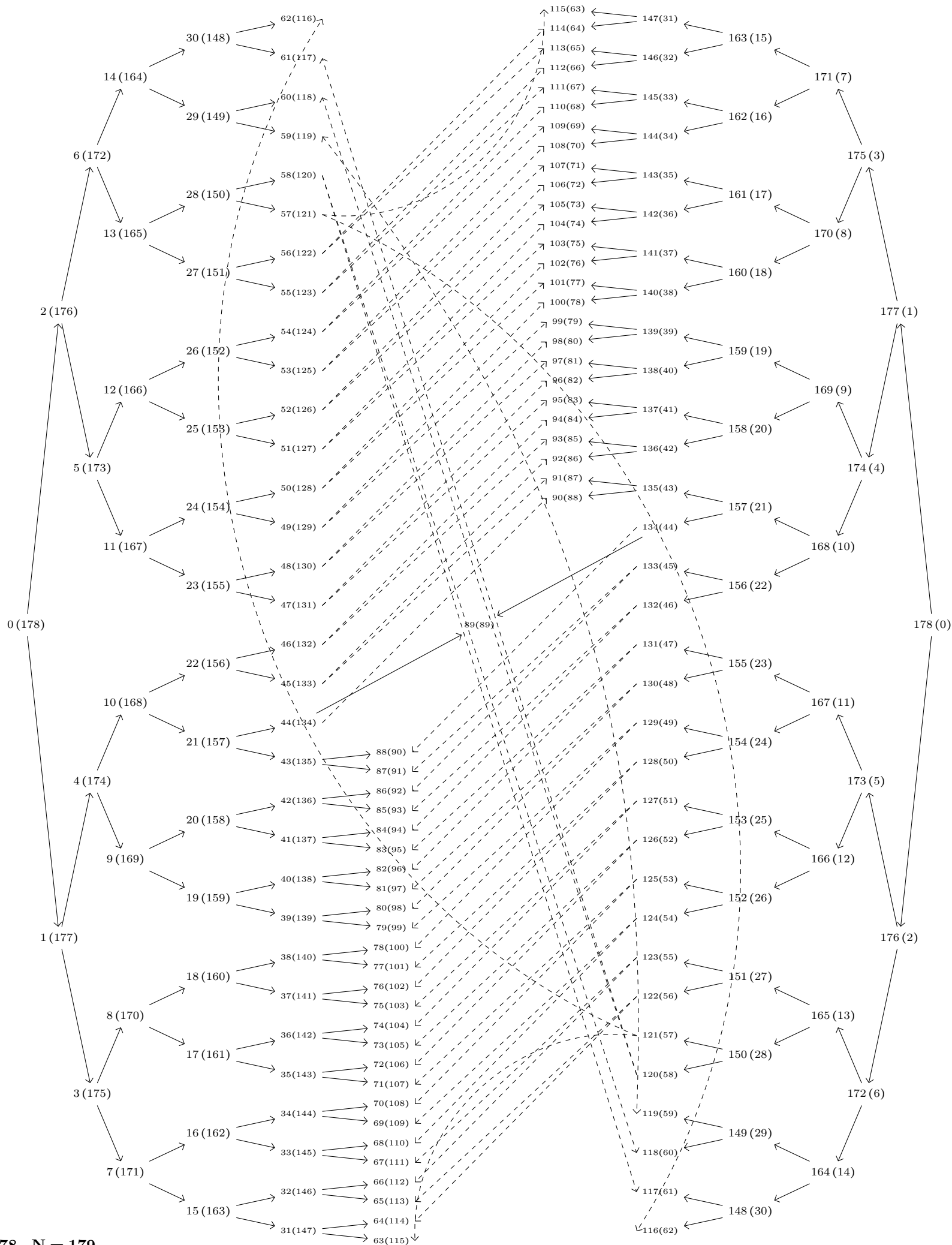




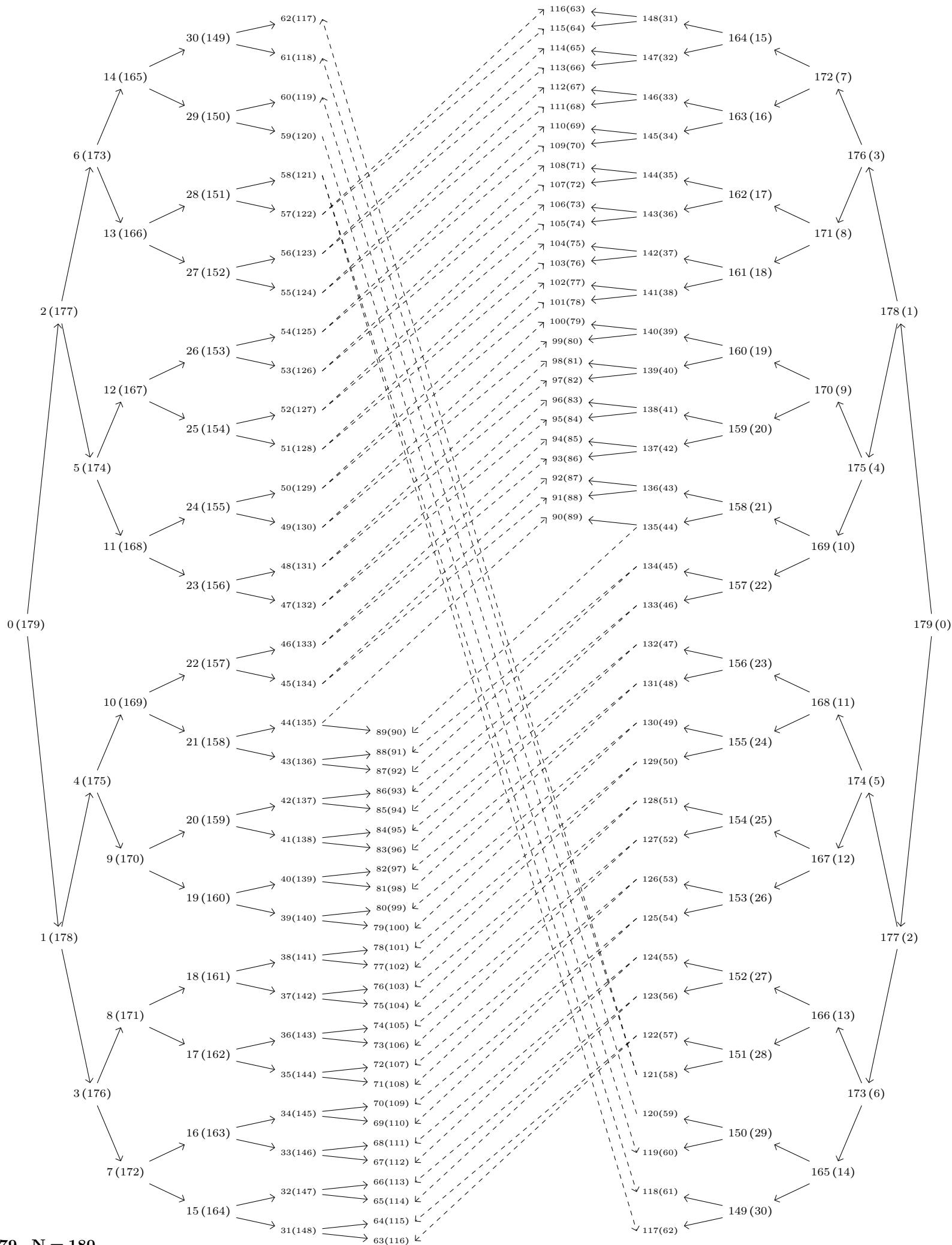


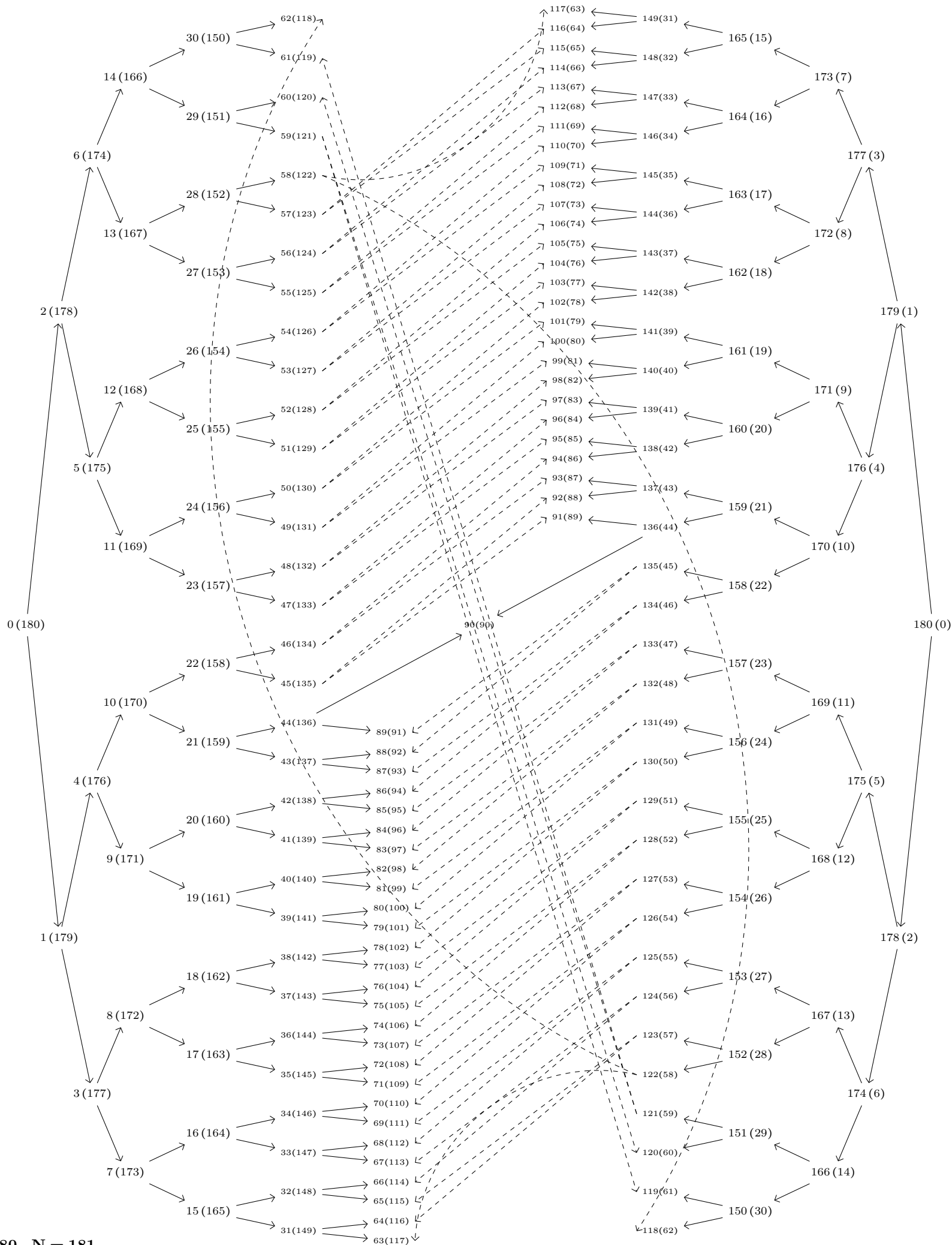


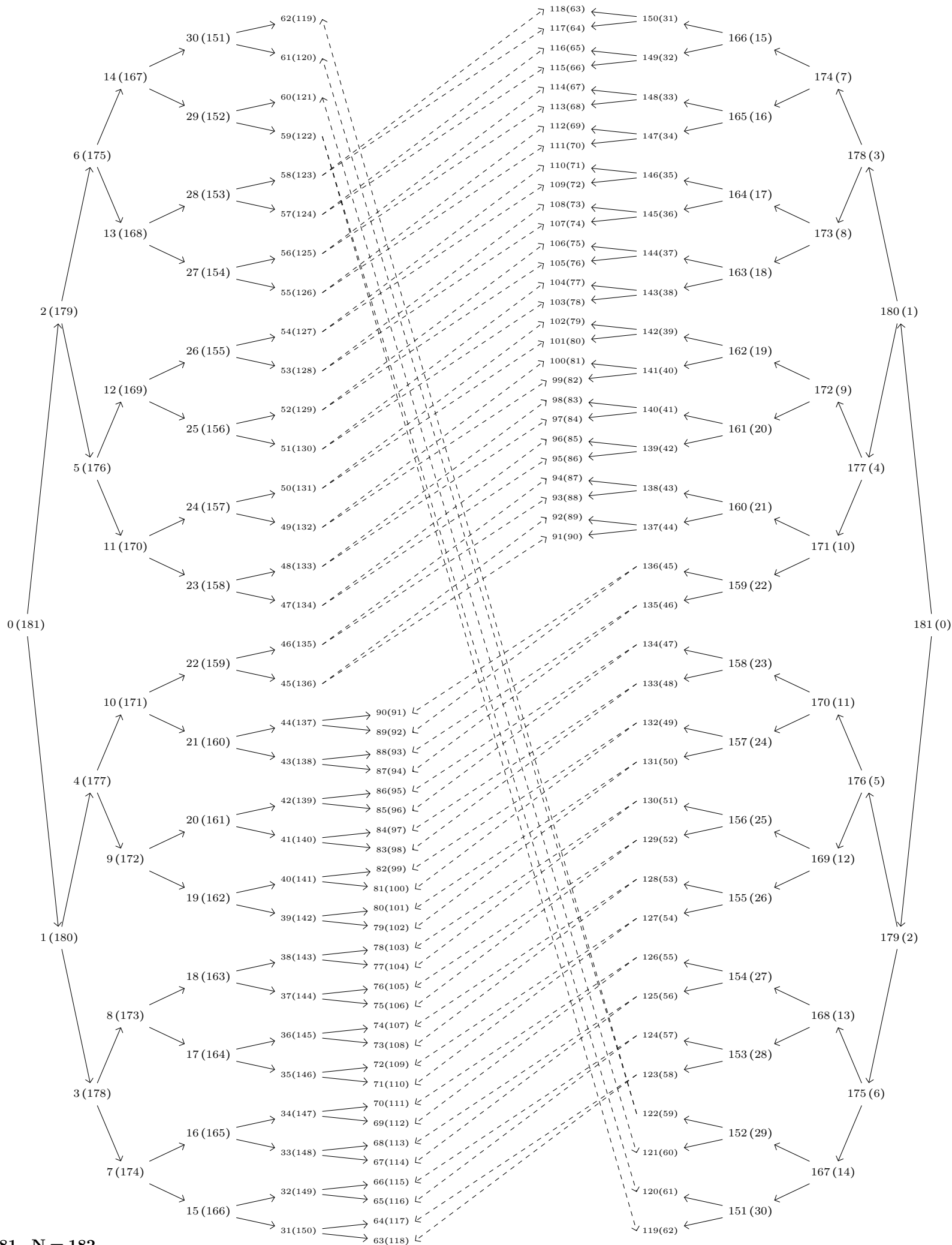


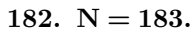


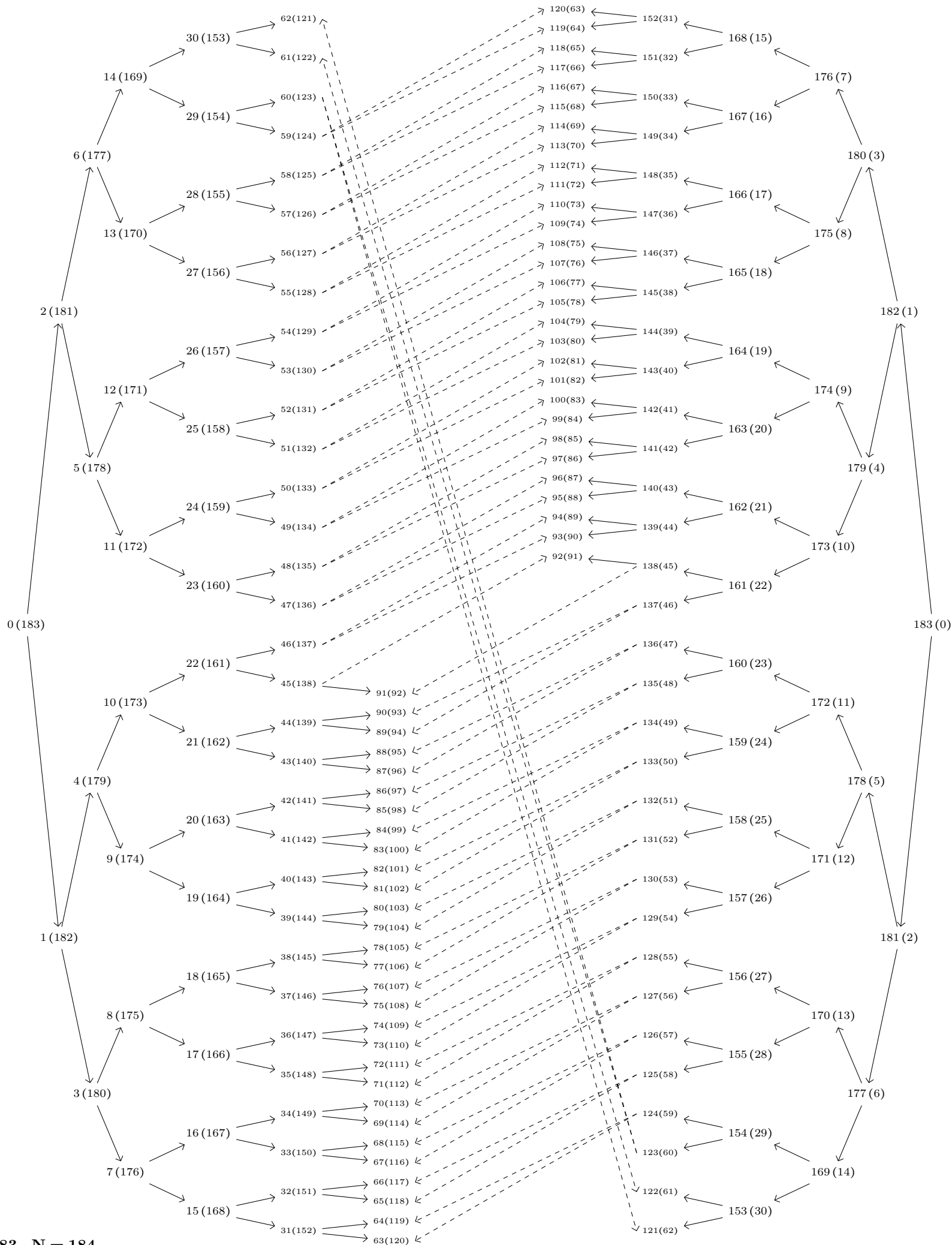
178. N = 179.

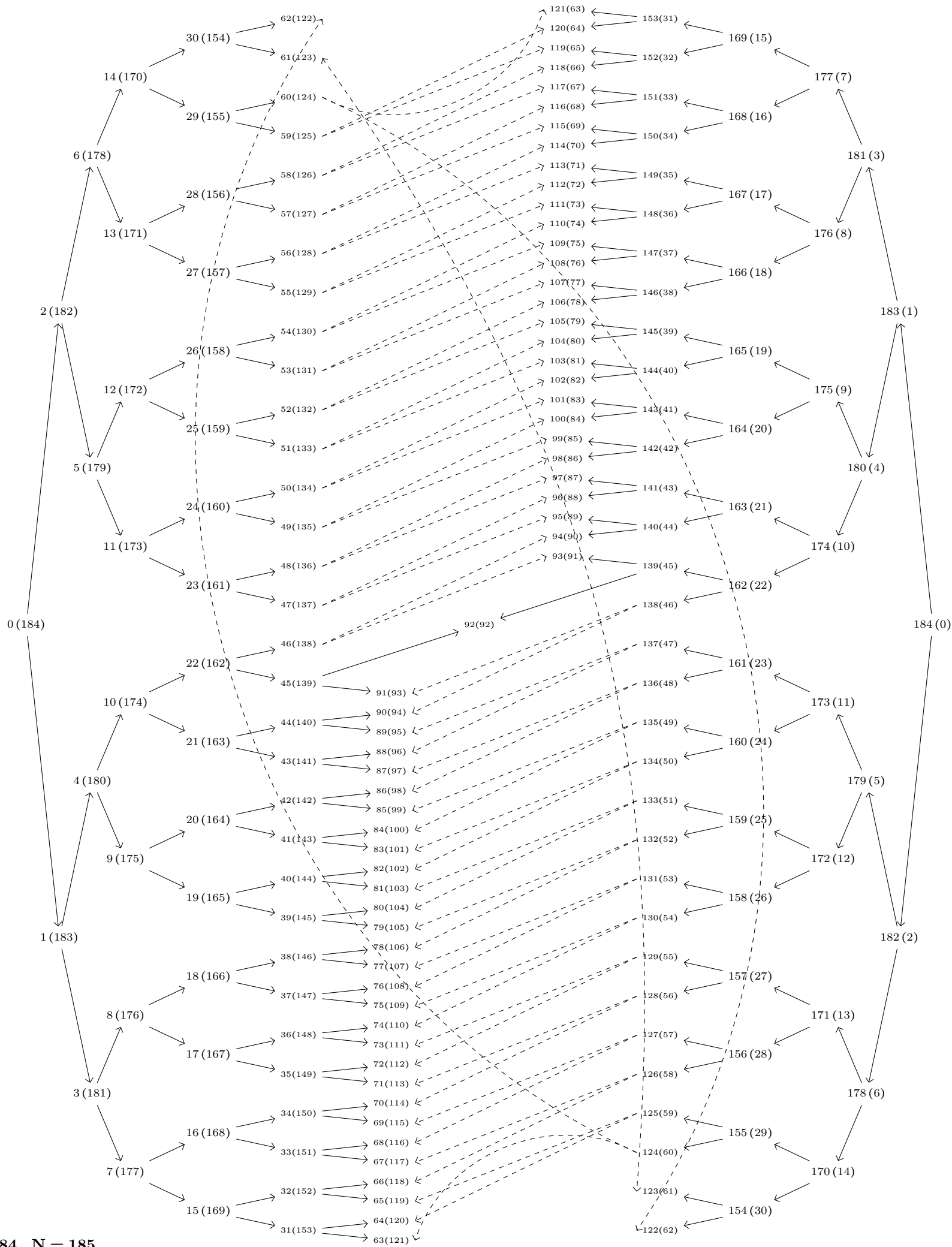




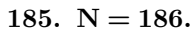


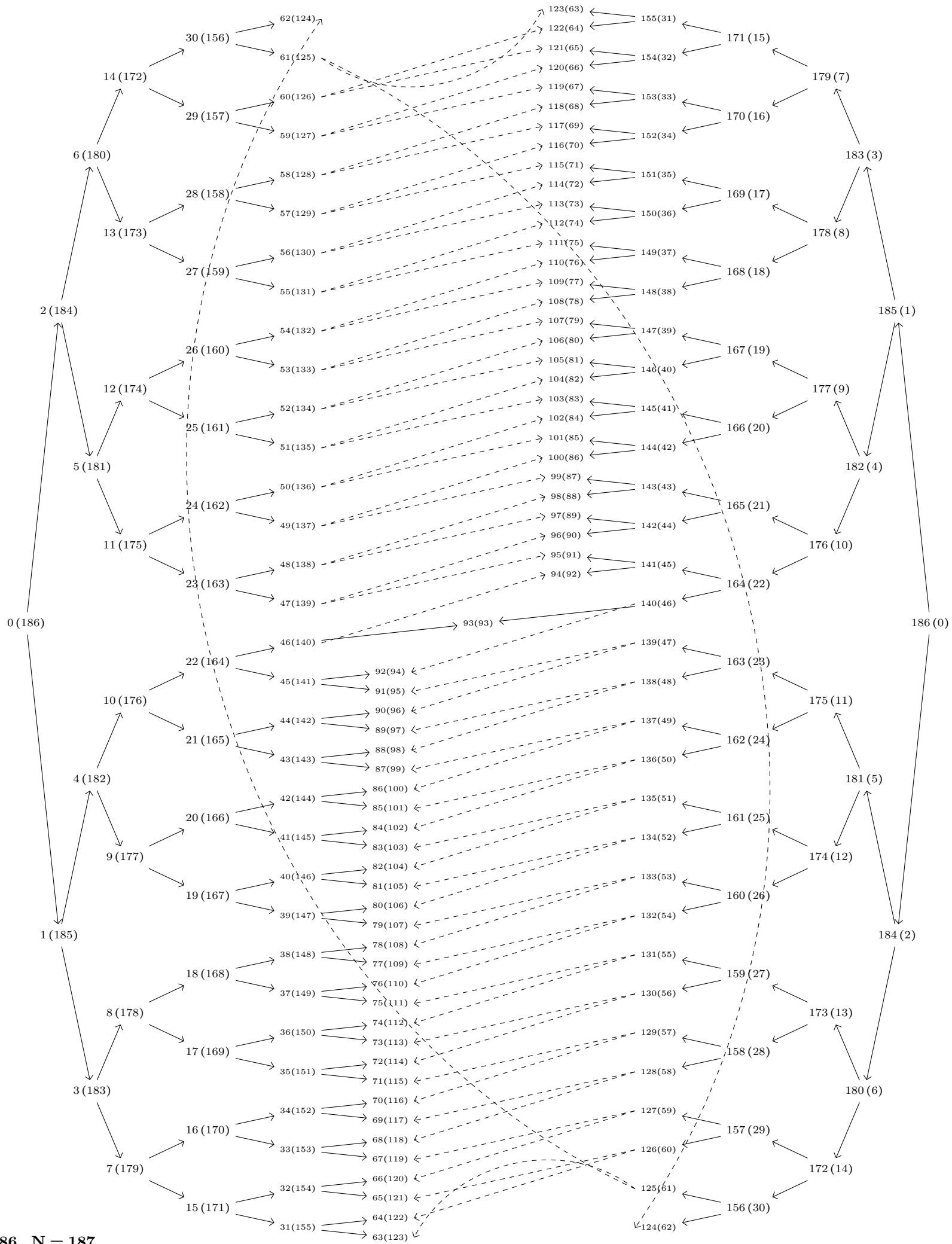


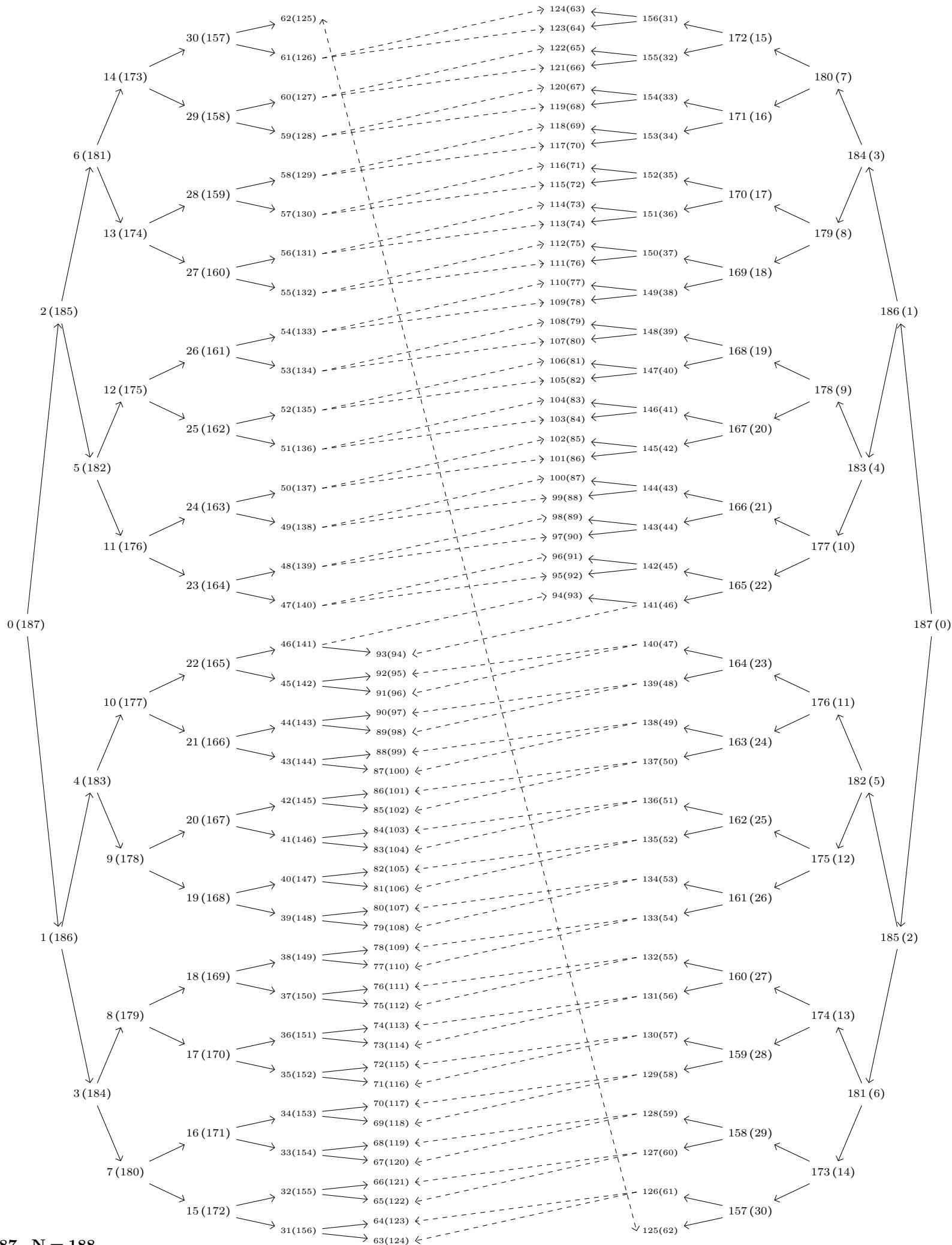




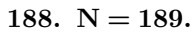
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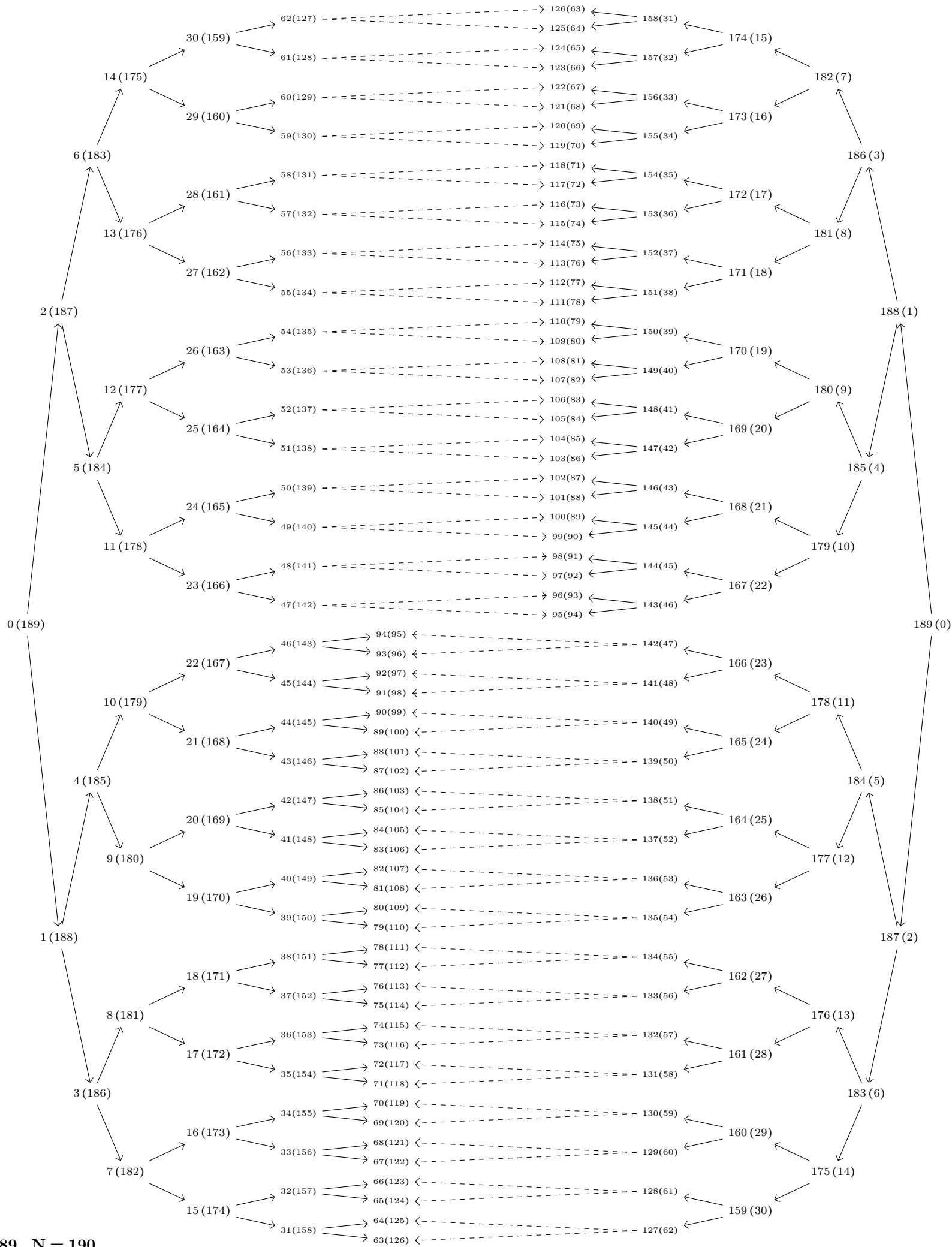


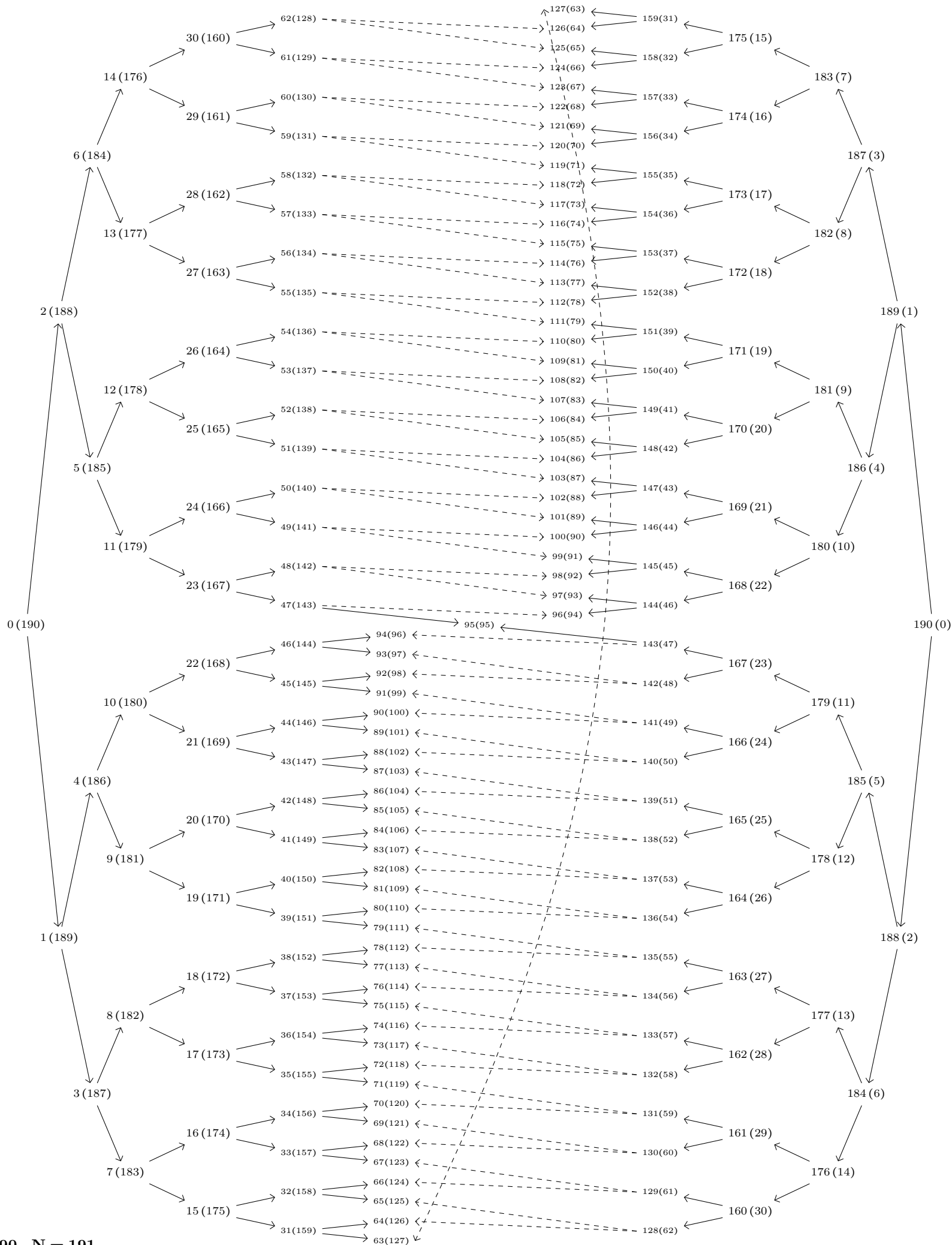


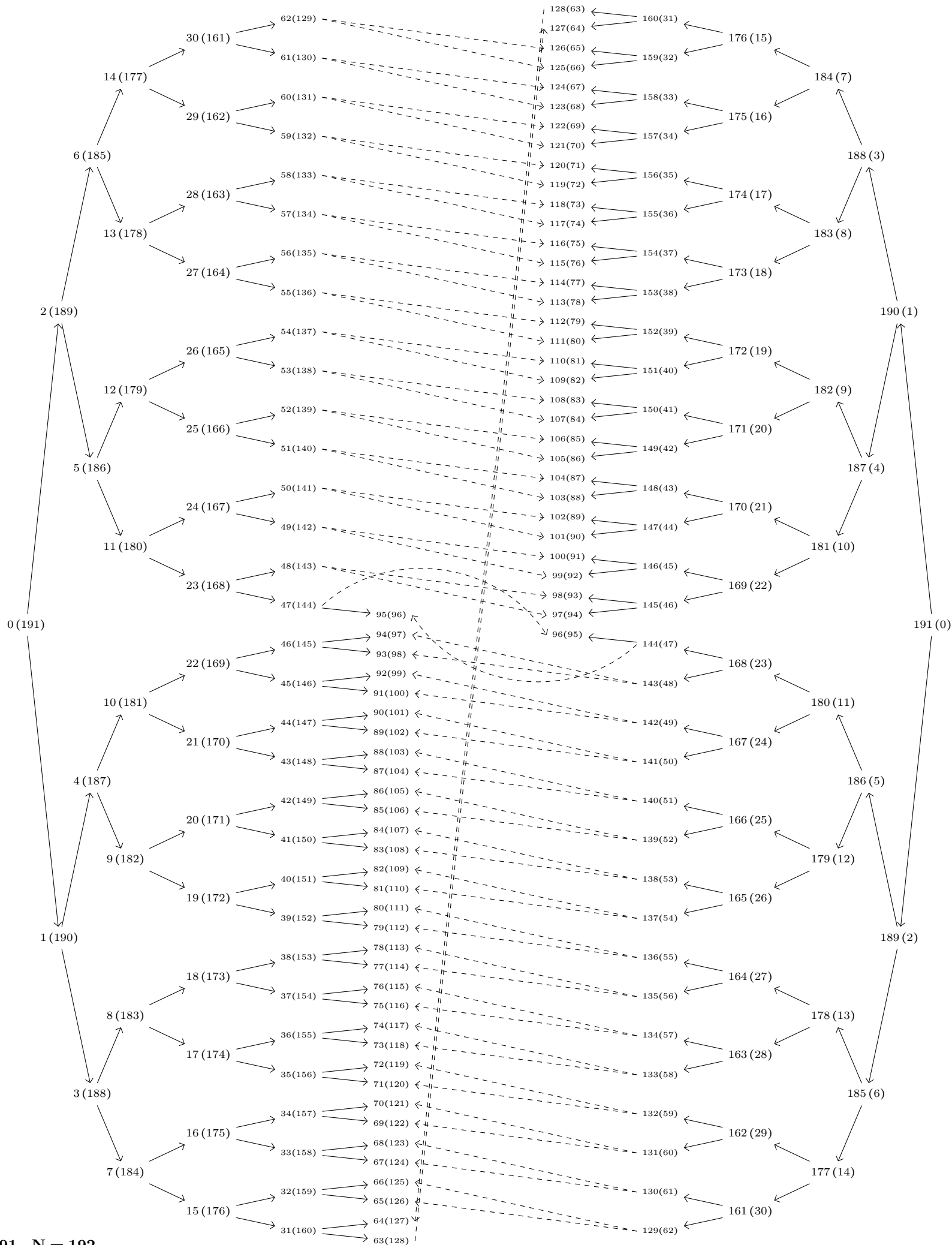


187. N = 188.

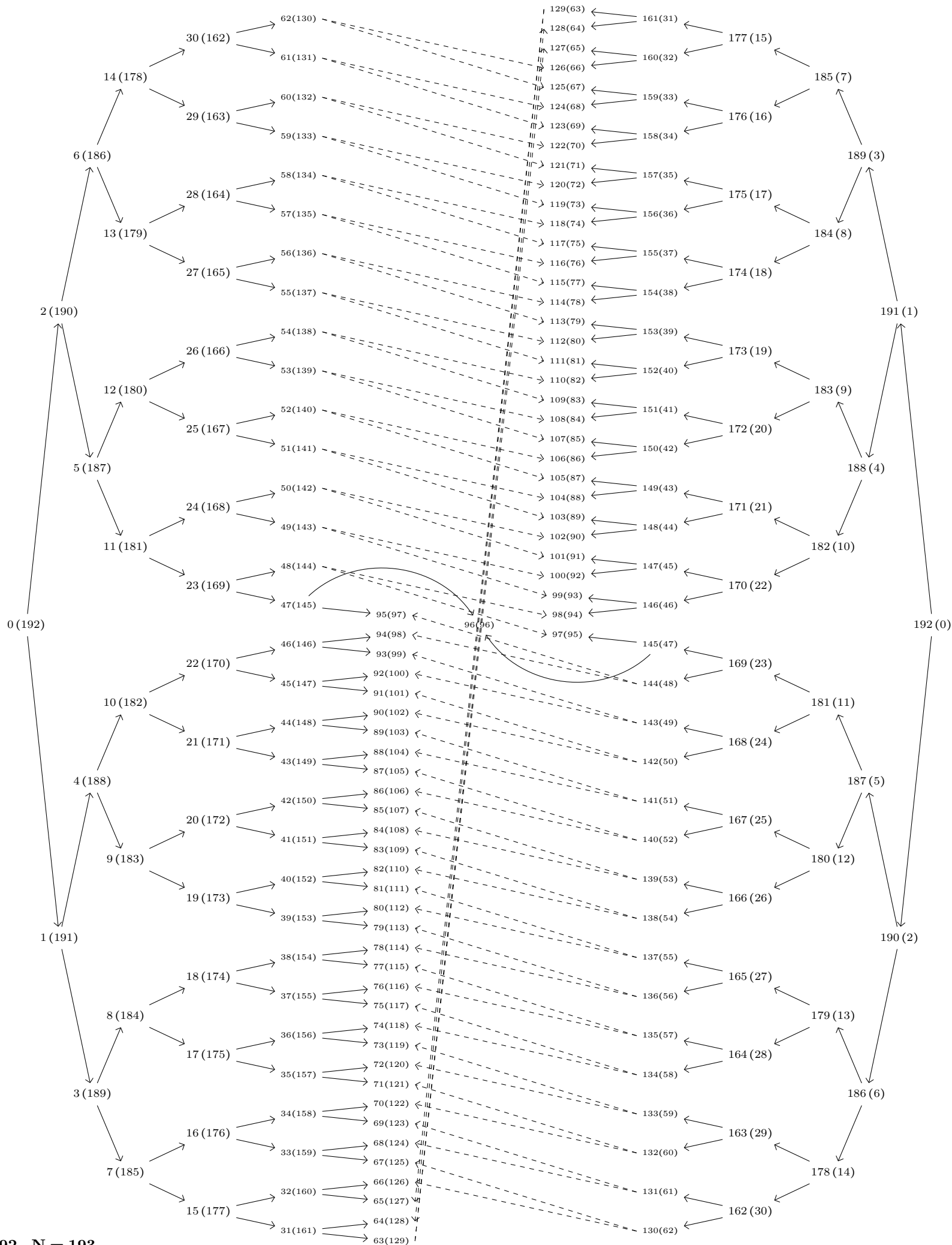


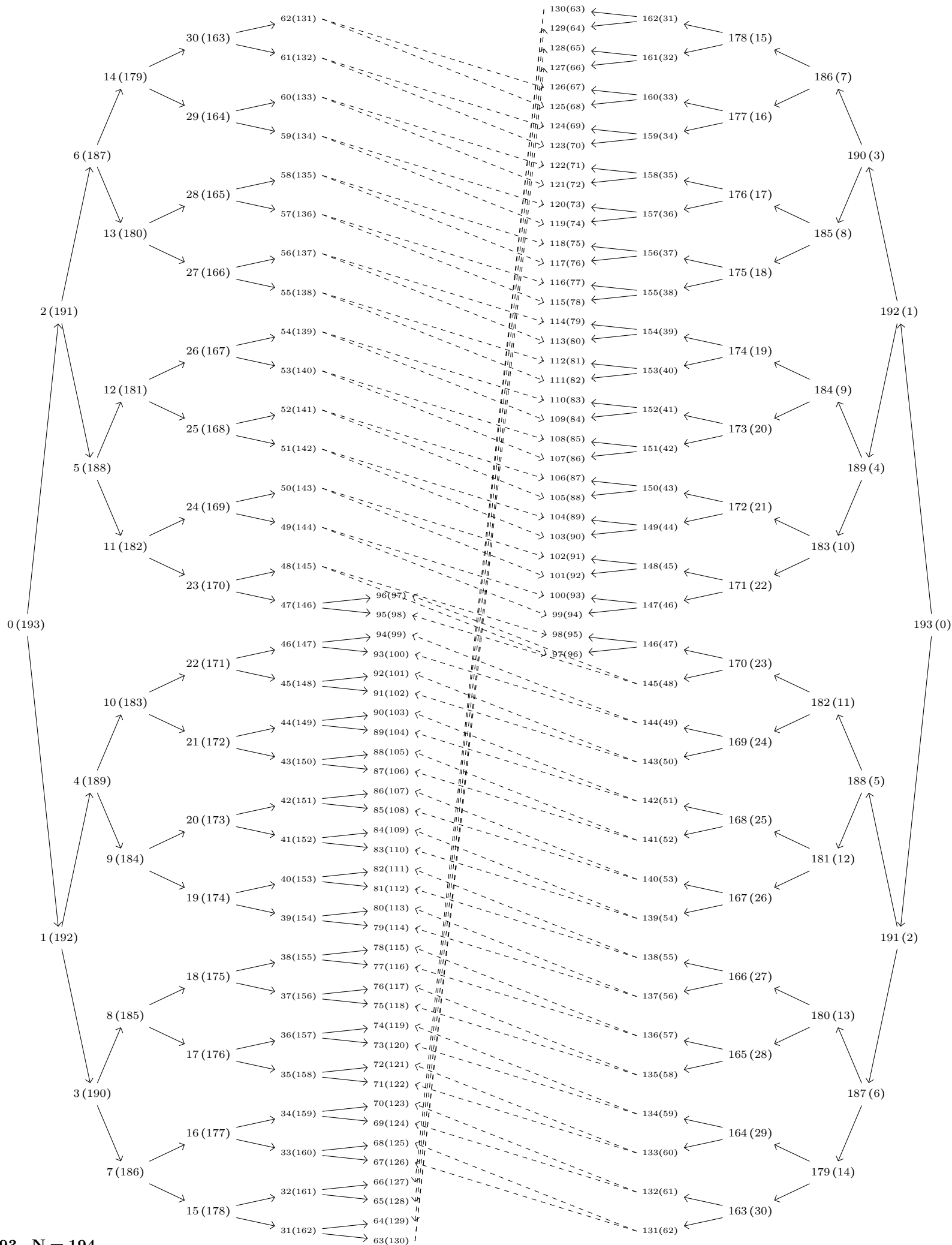


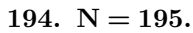


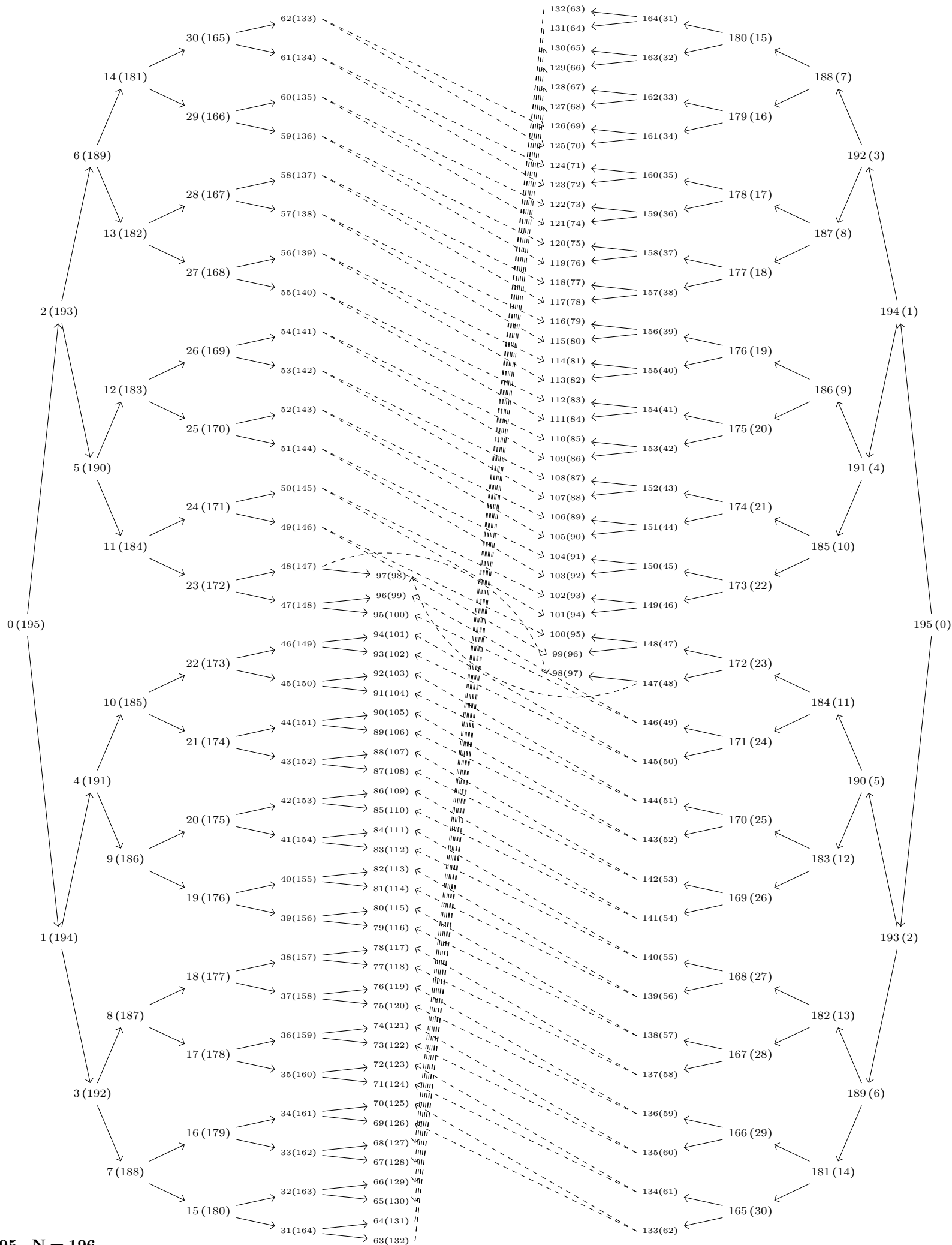


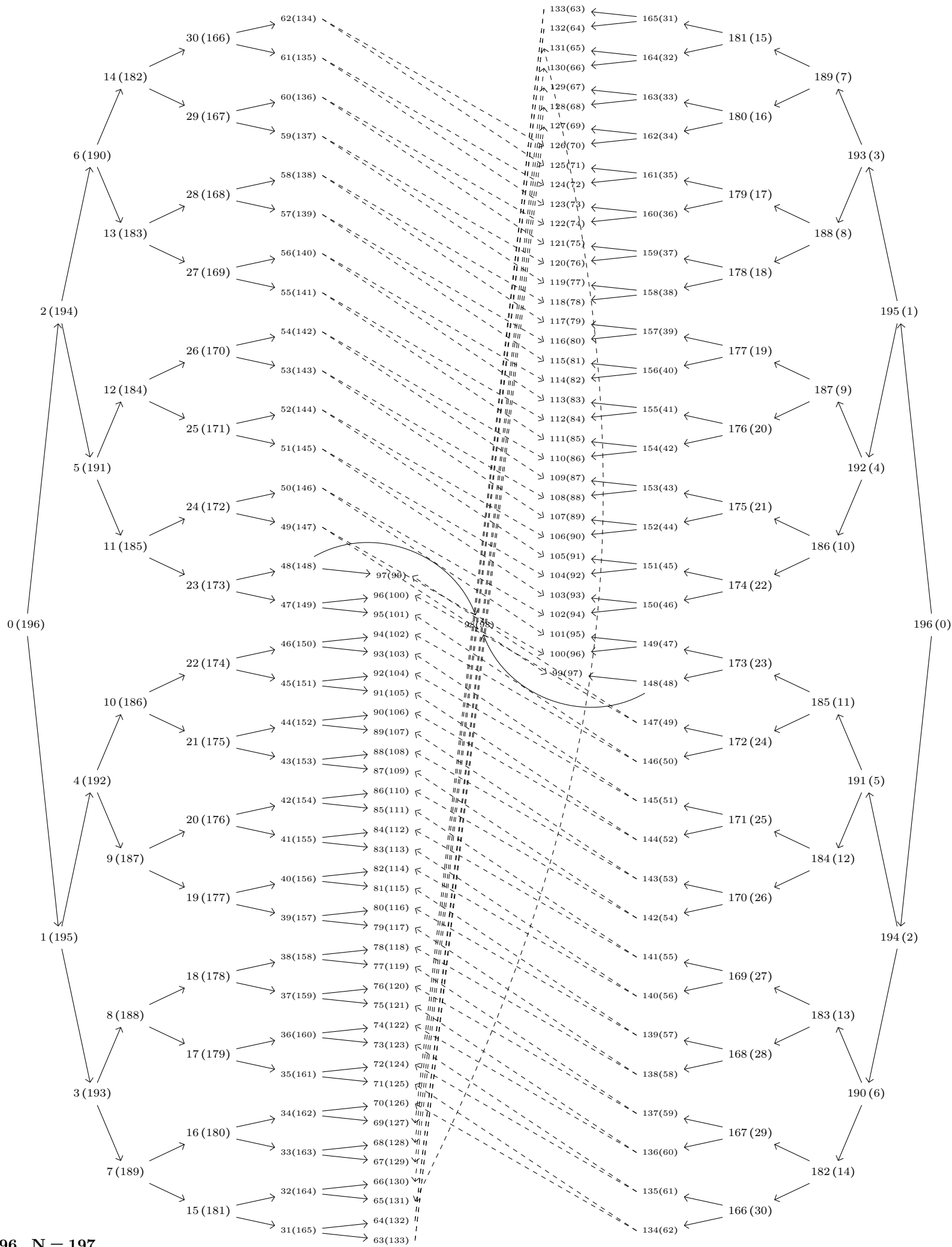
191. N = 192.

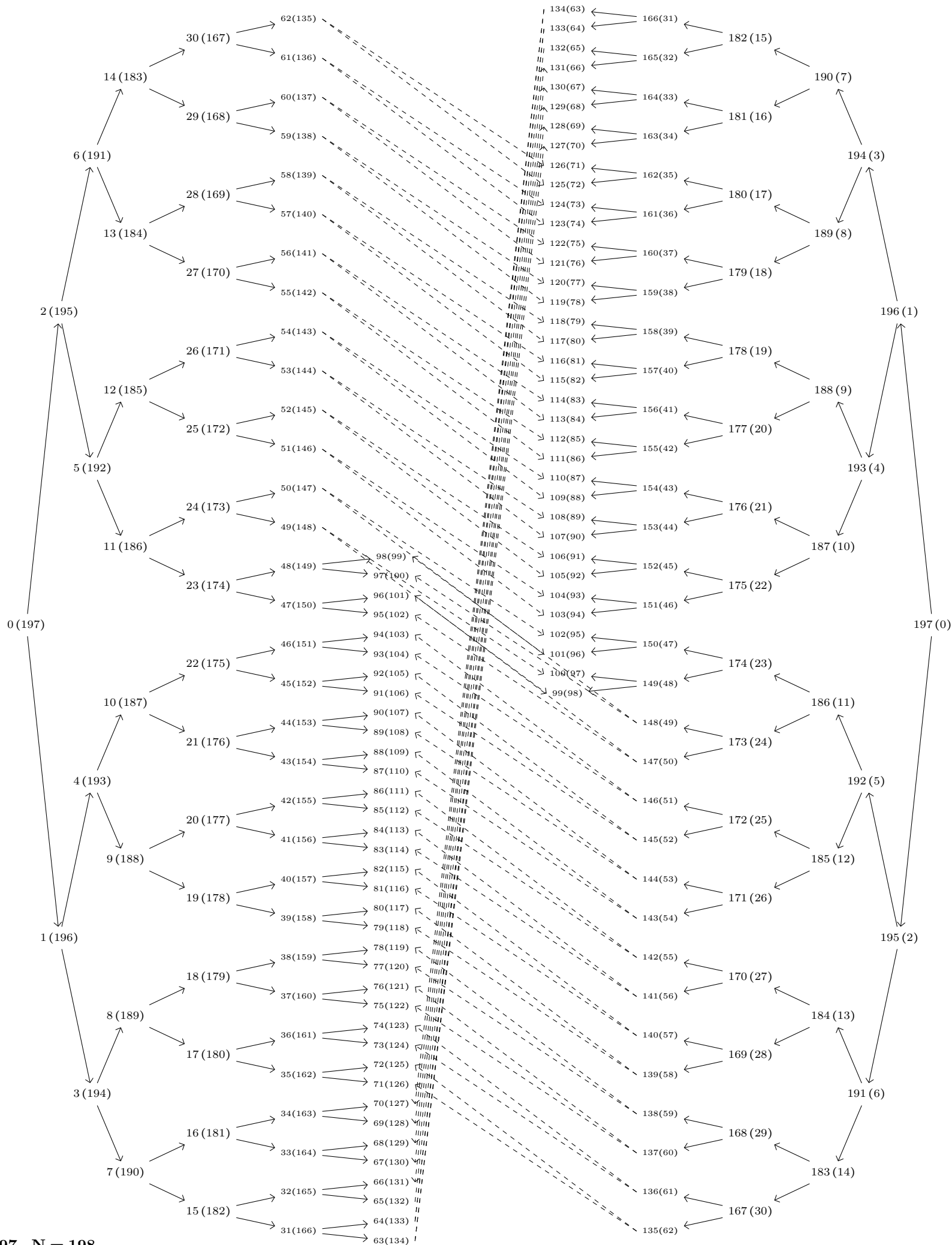




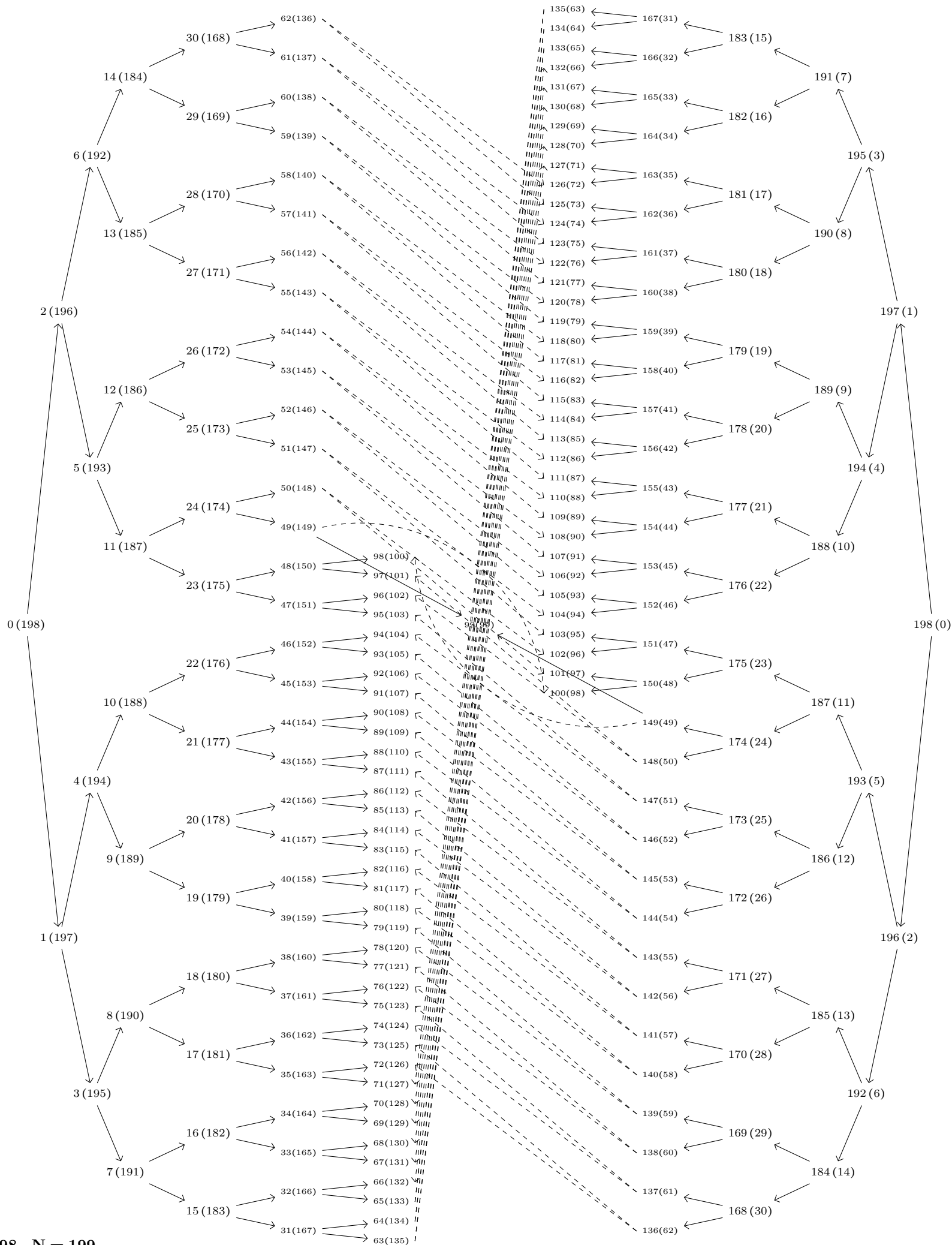


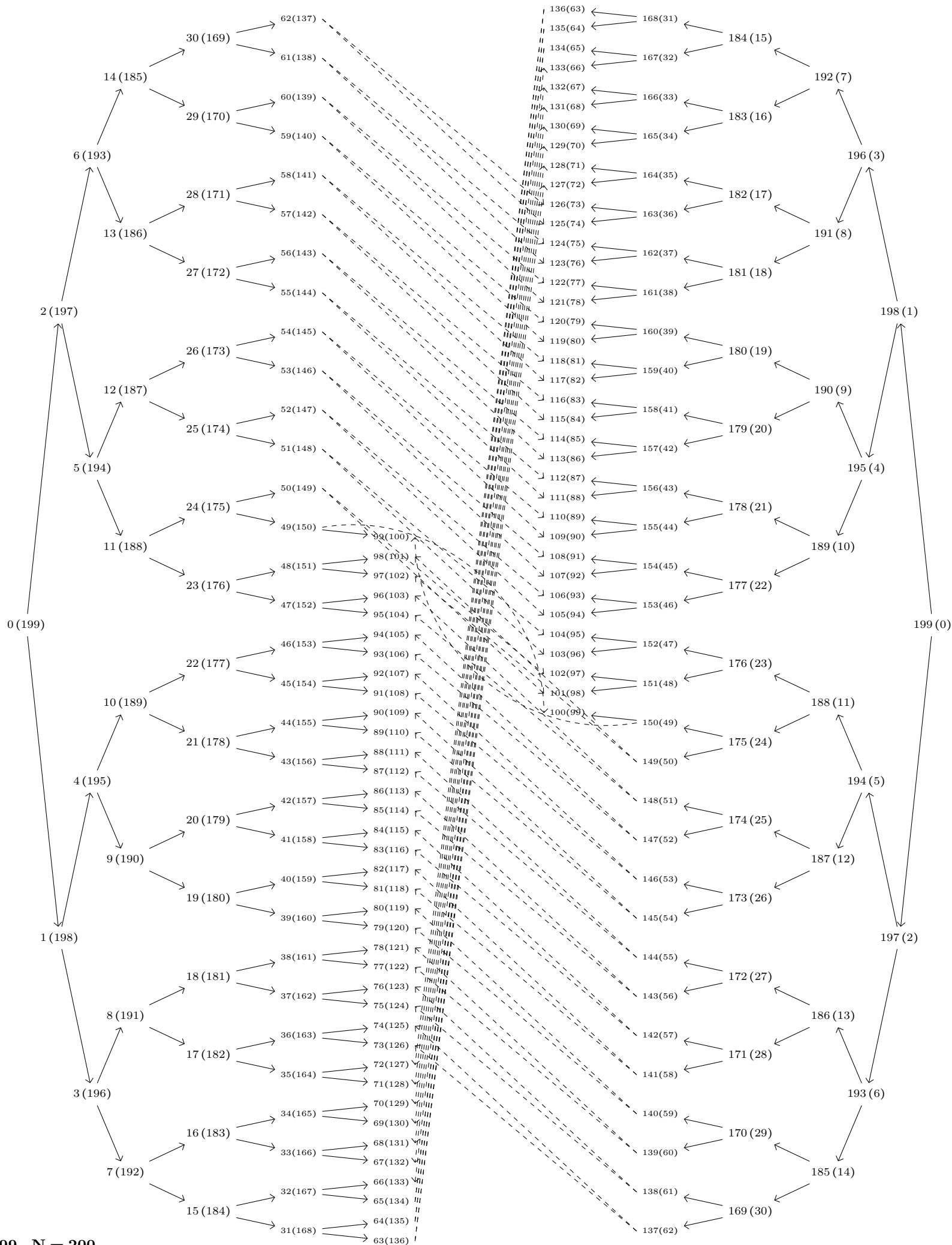




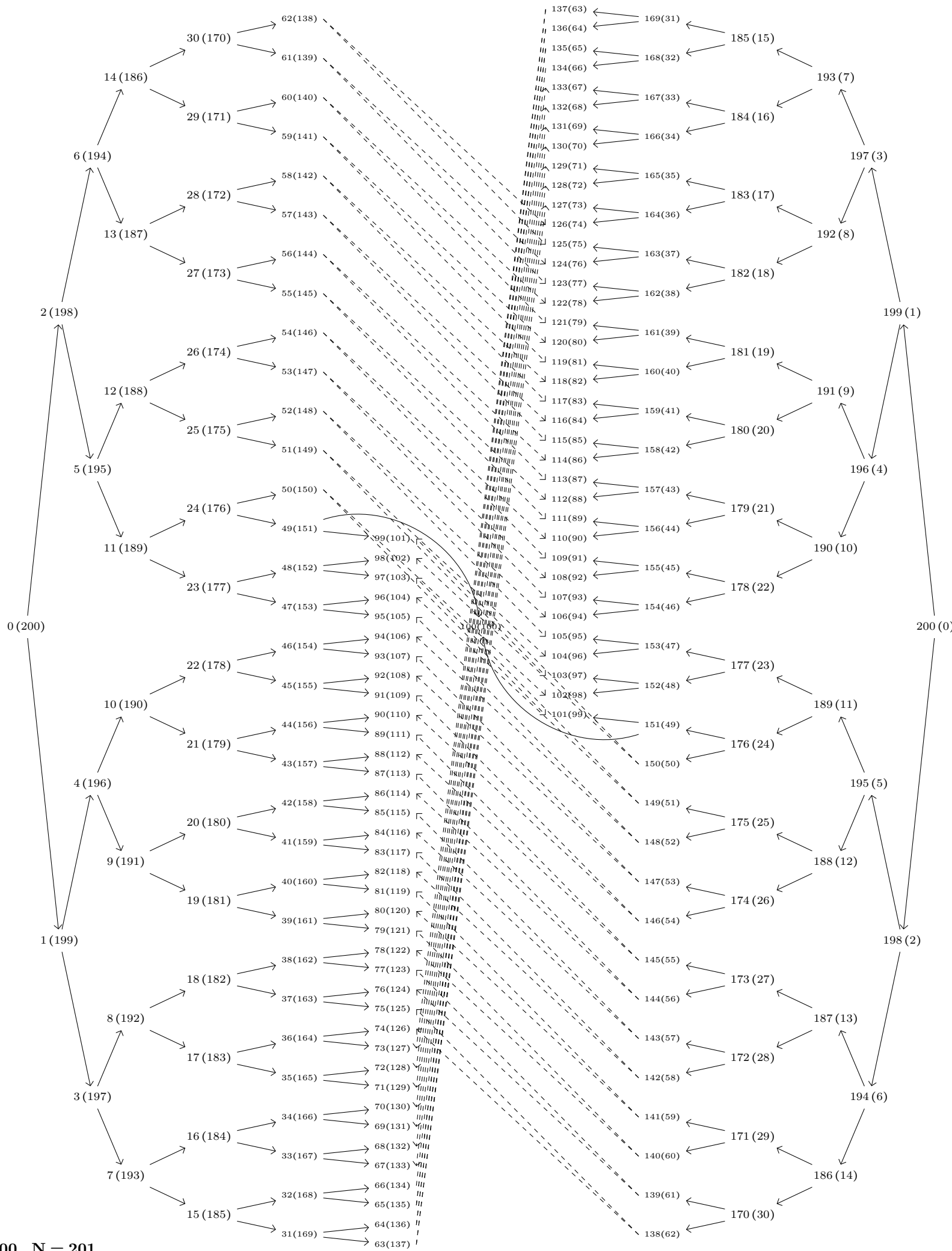


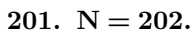
197. N = 198.

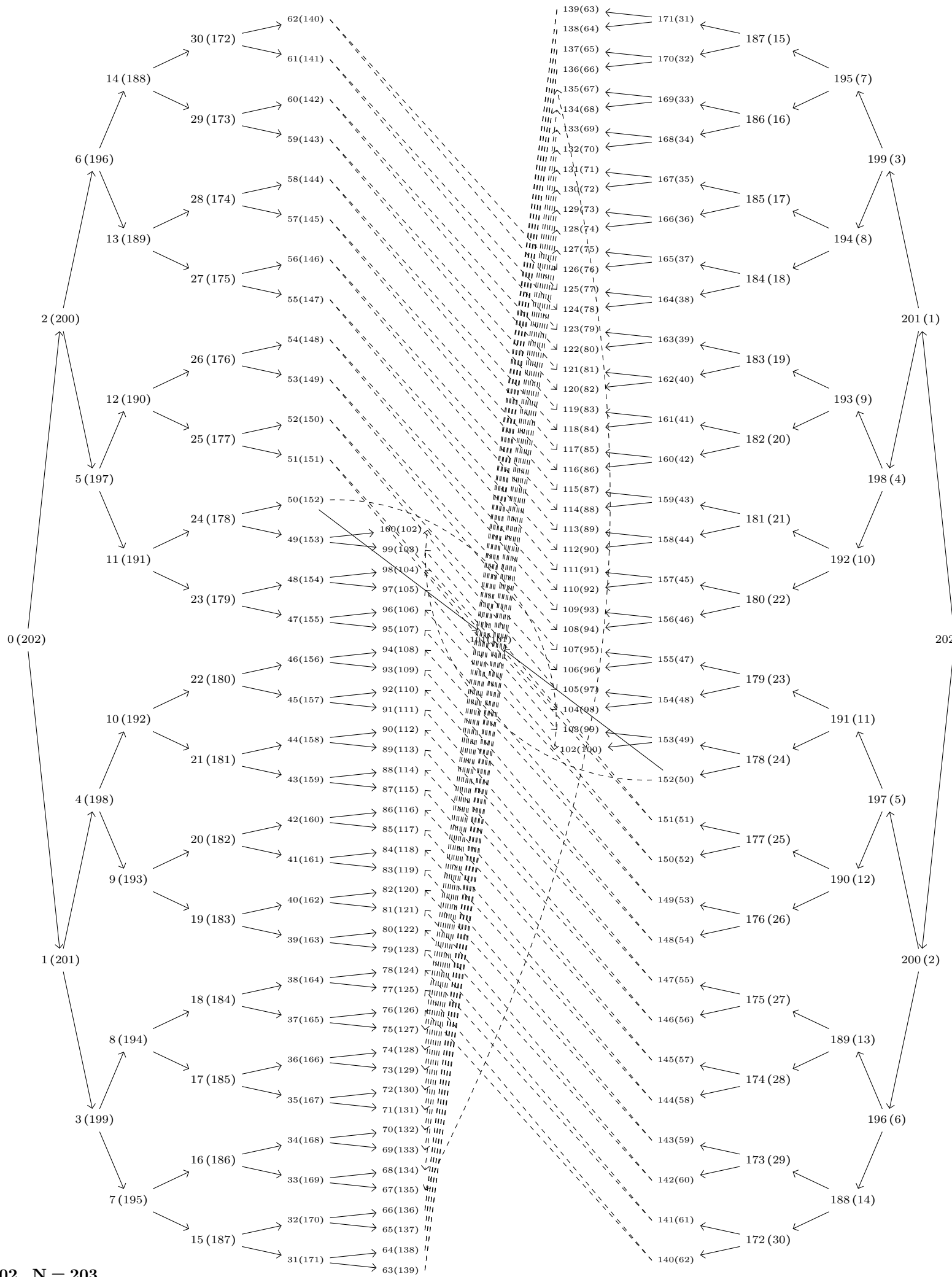


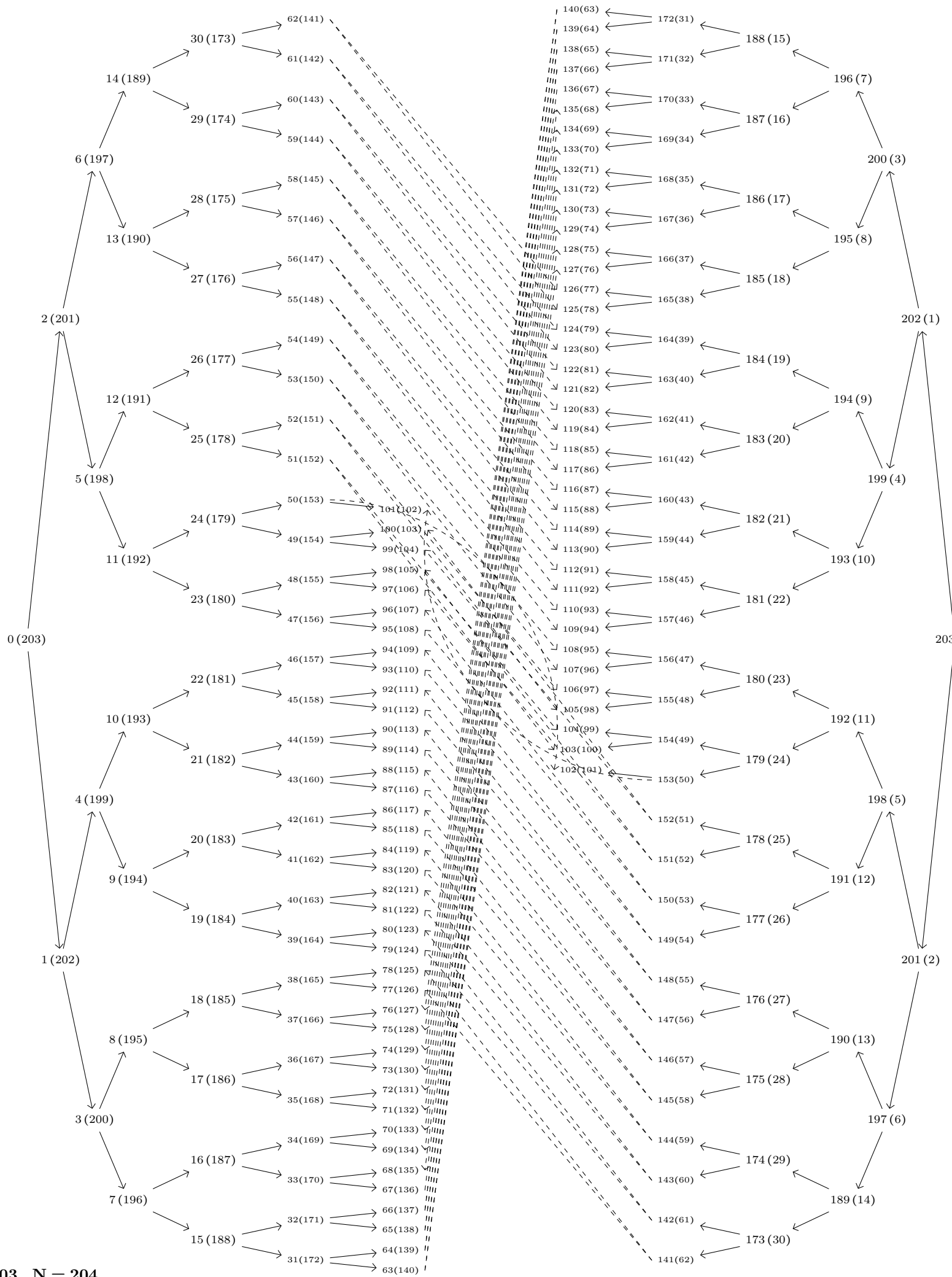


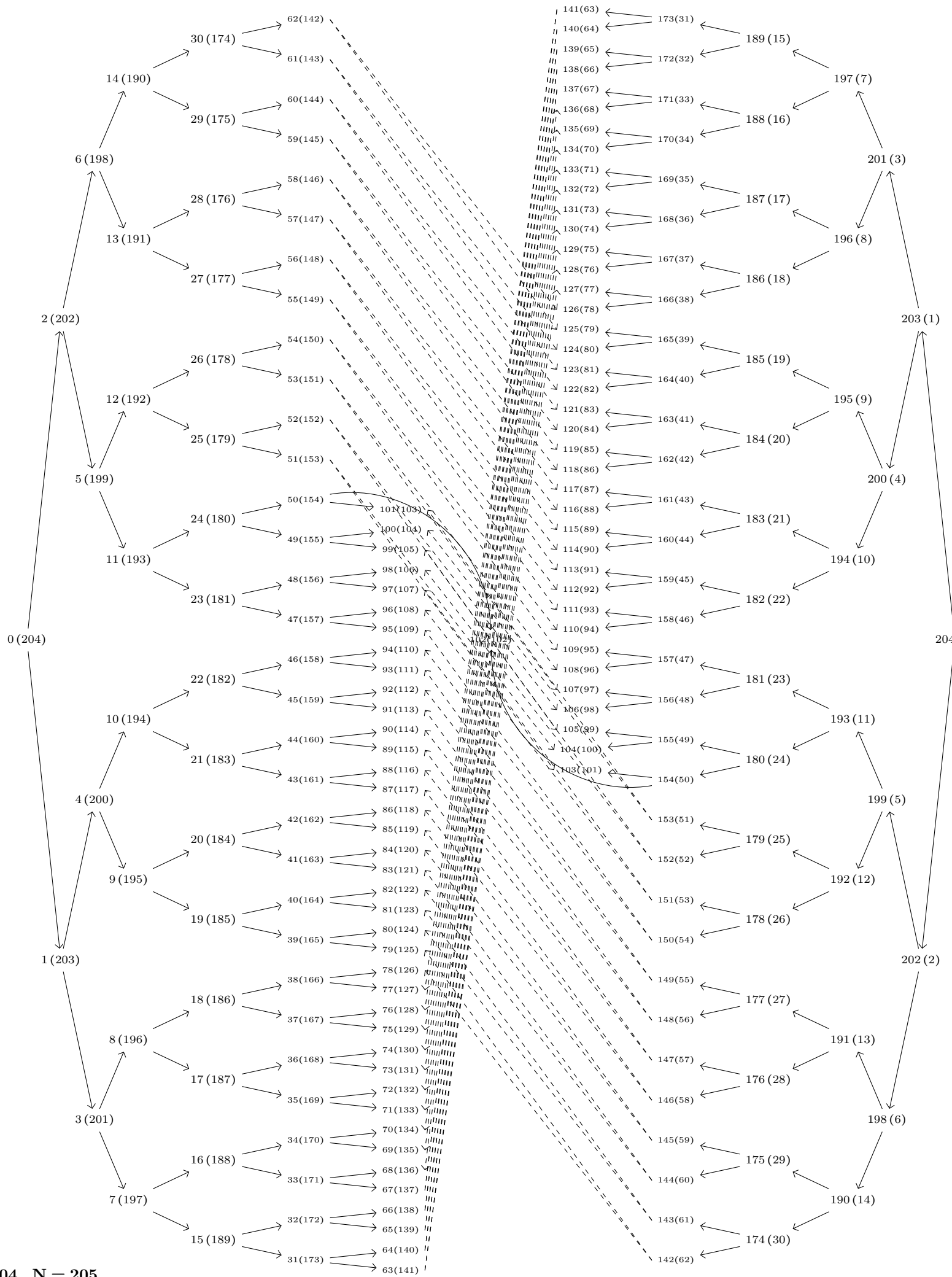
199. N = 200.

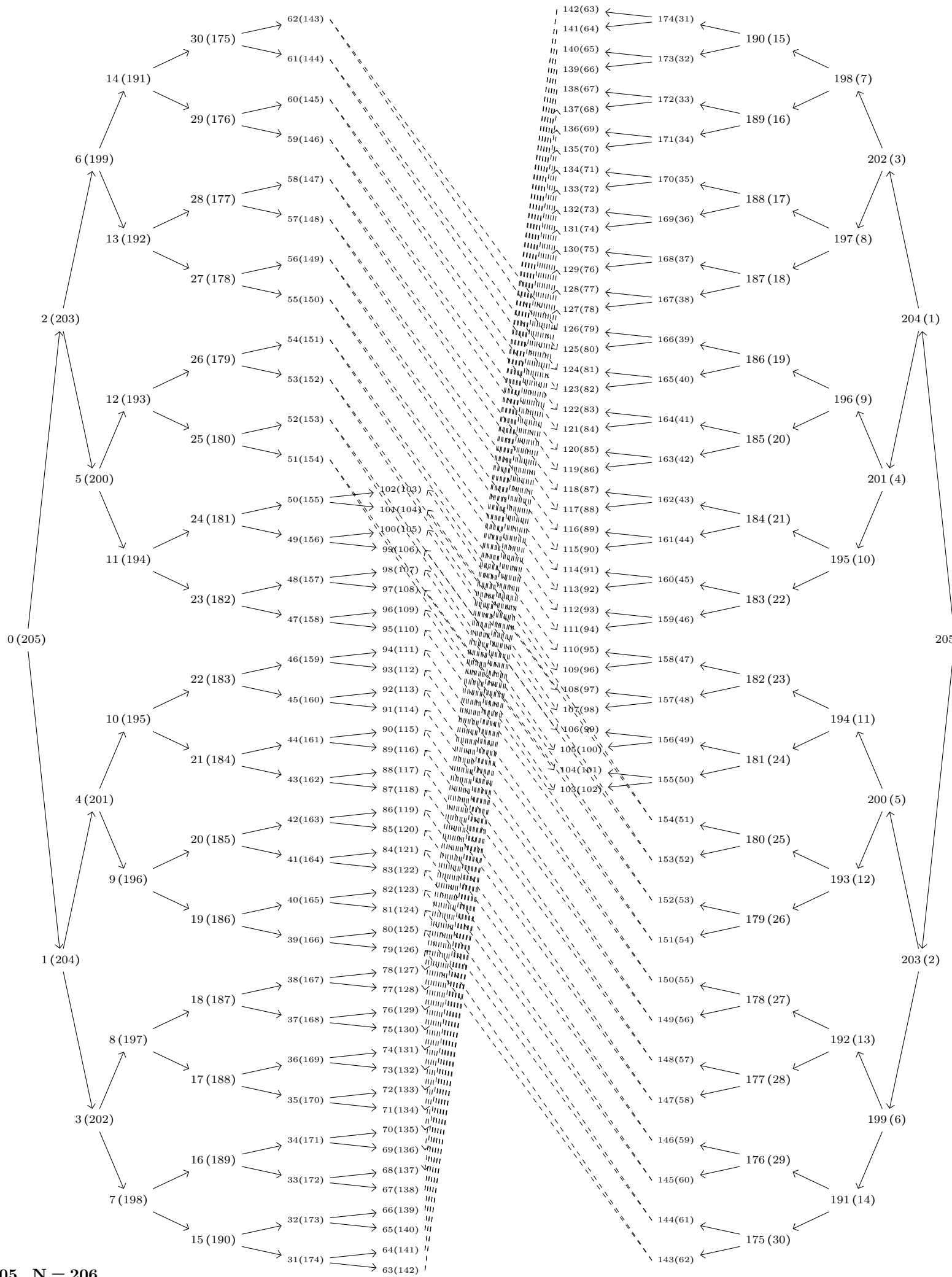


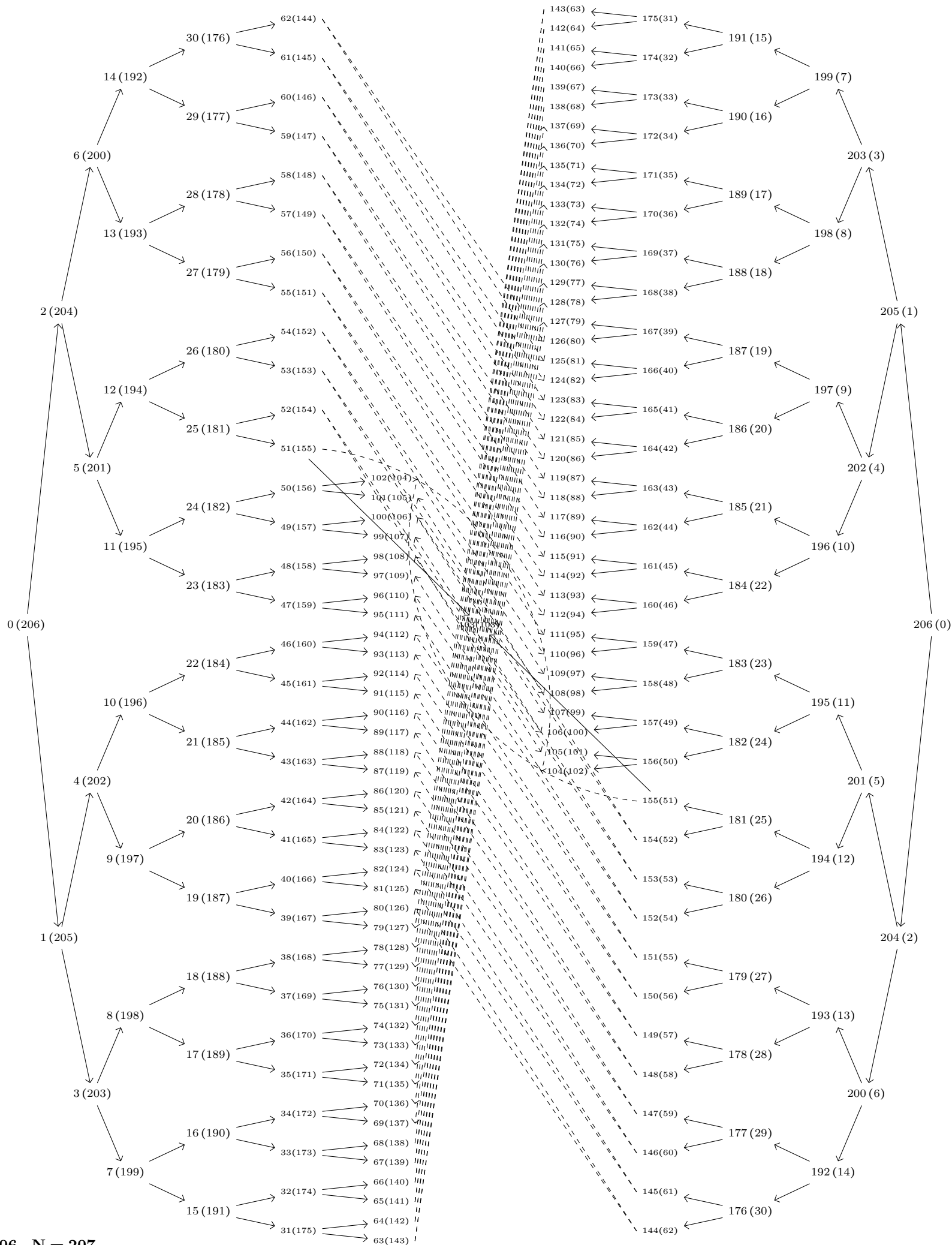


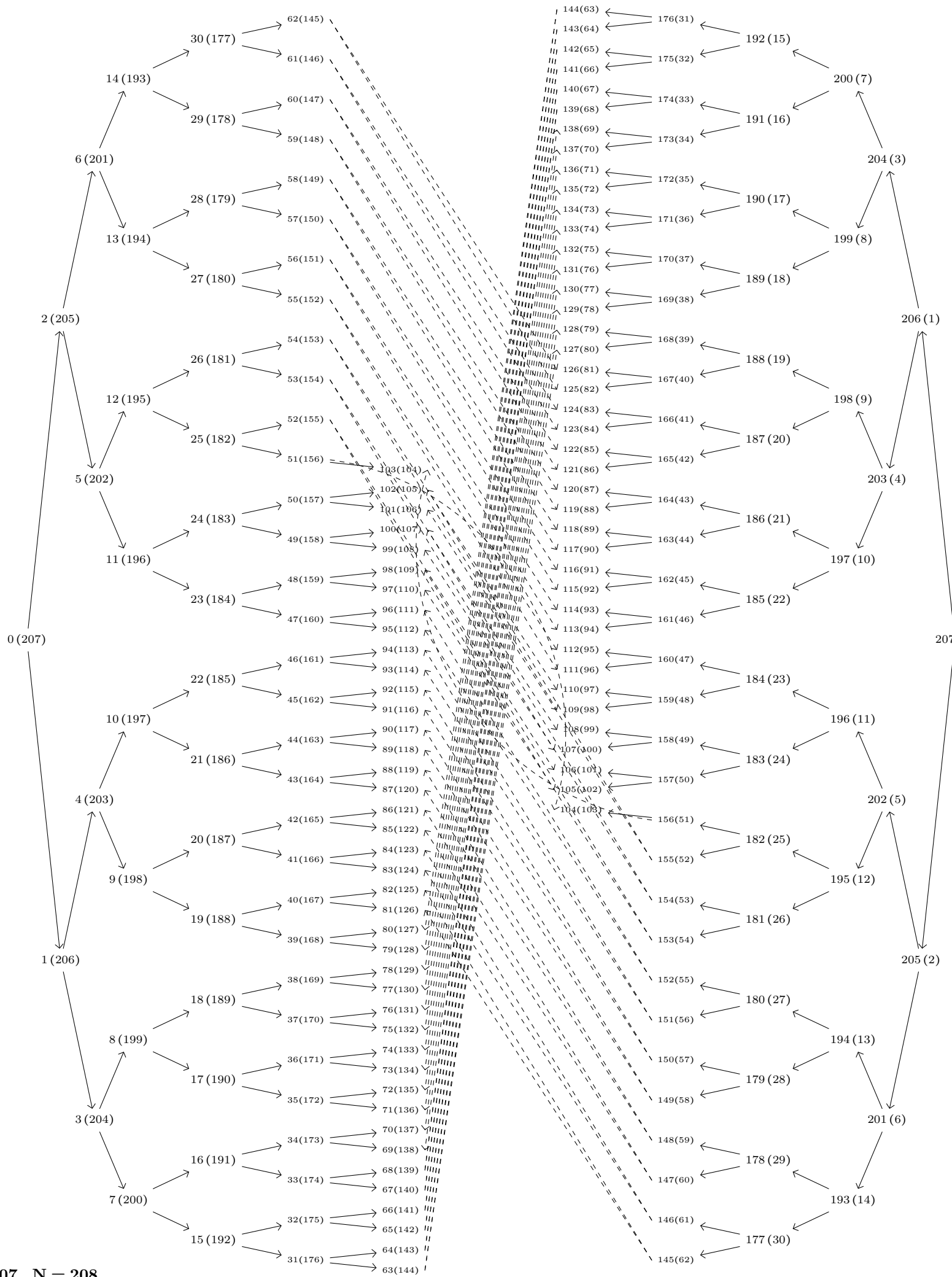


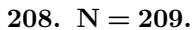


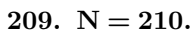


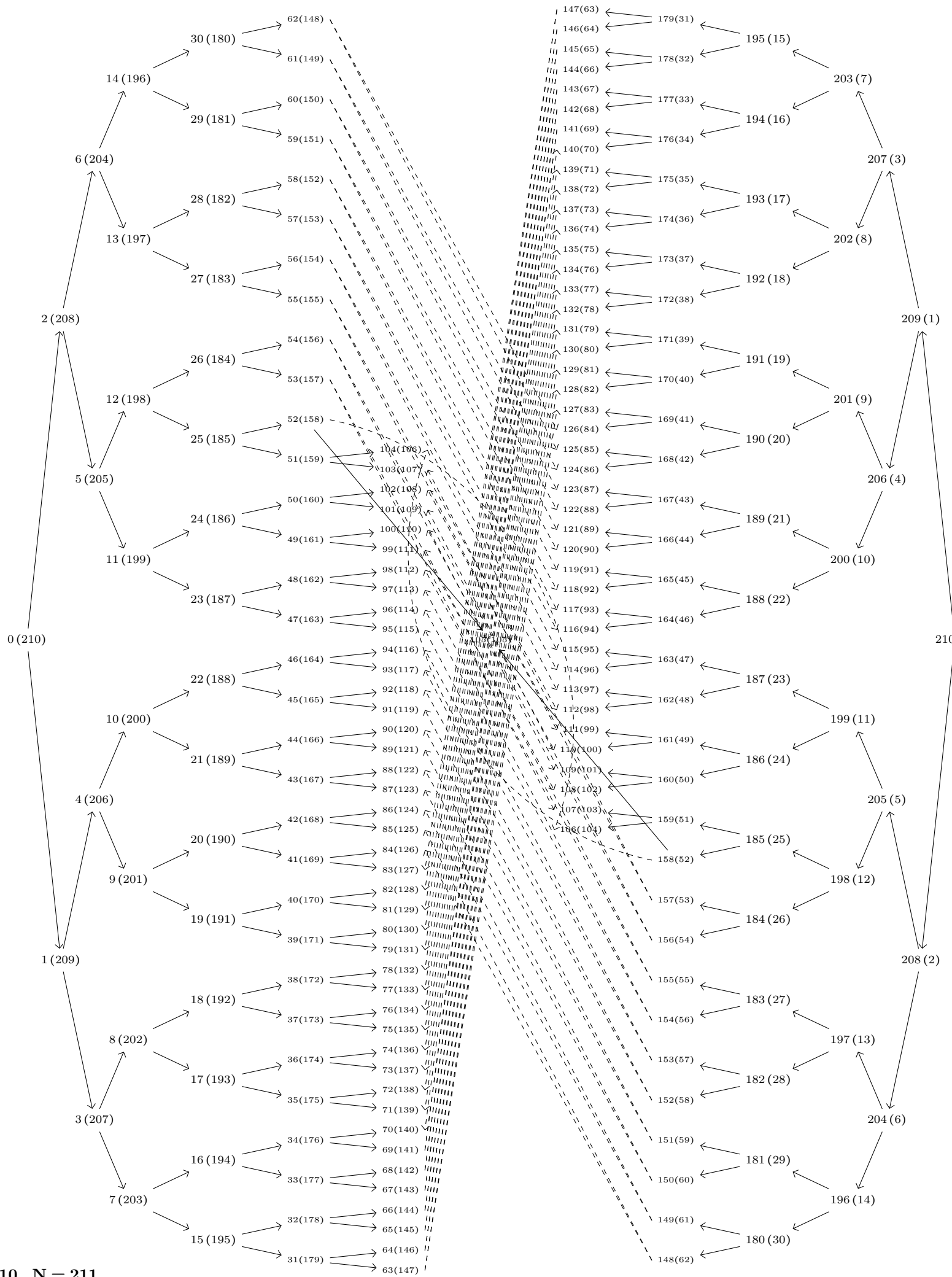


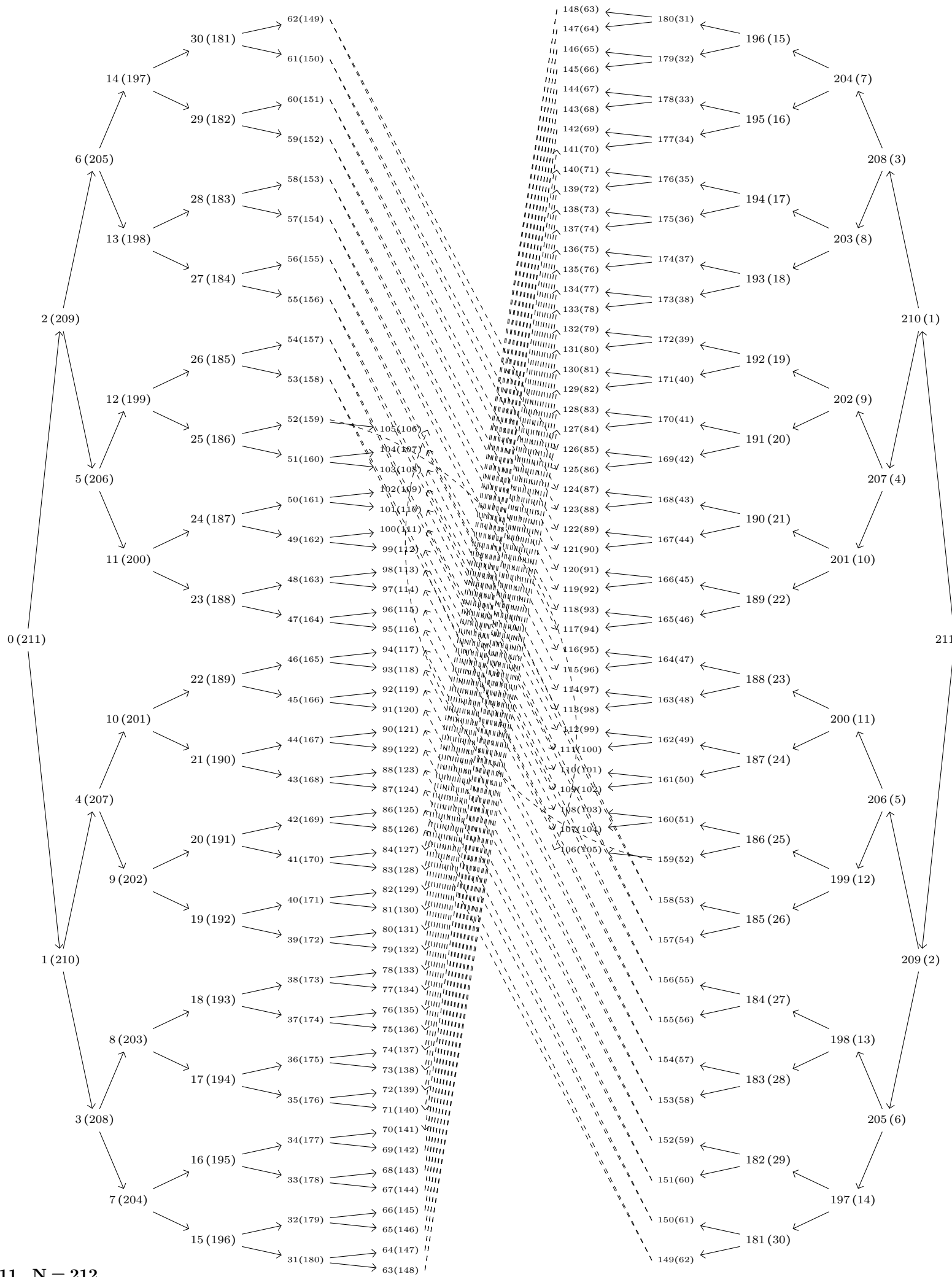


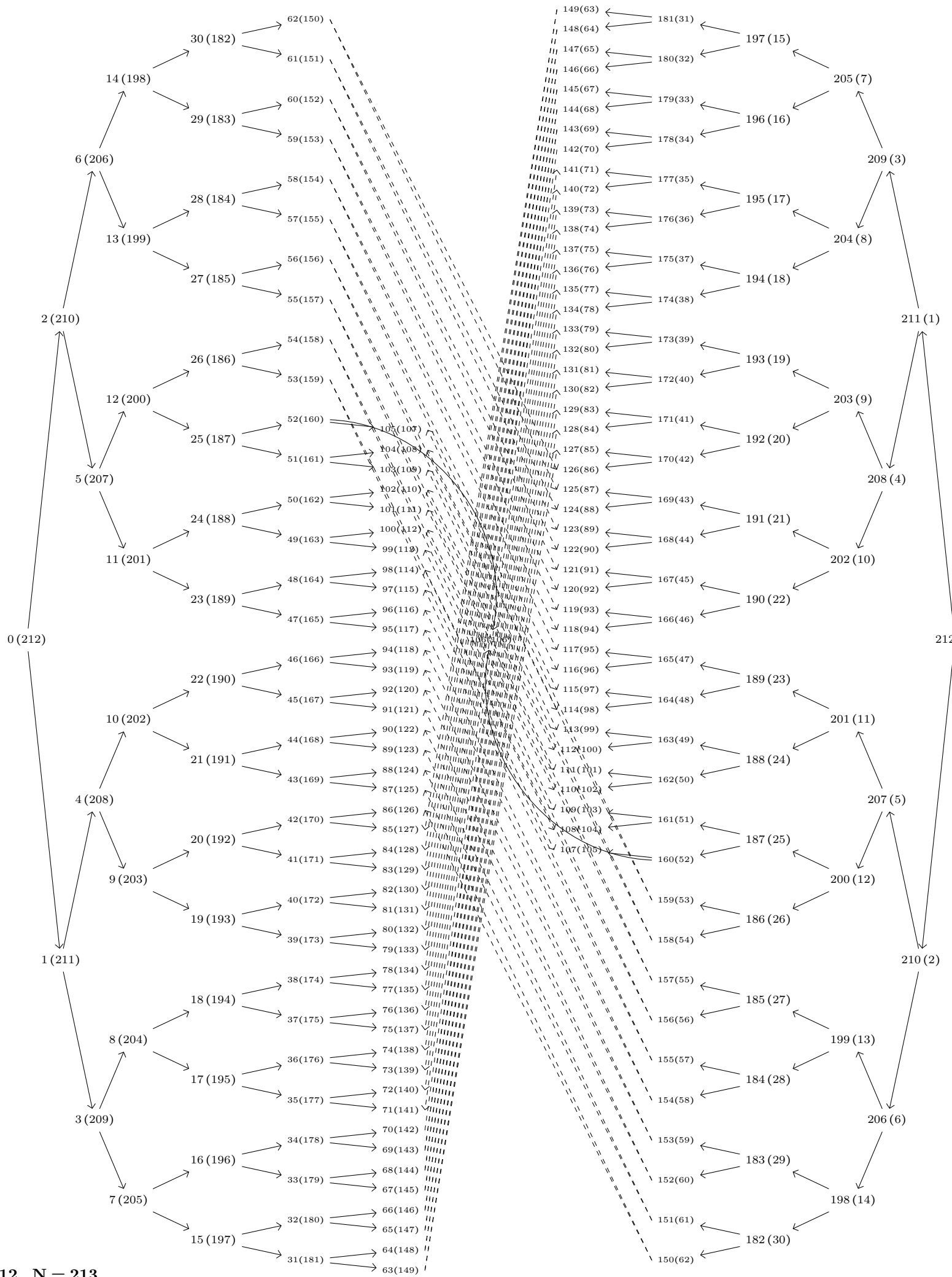


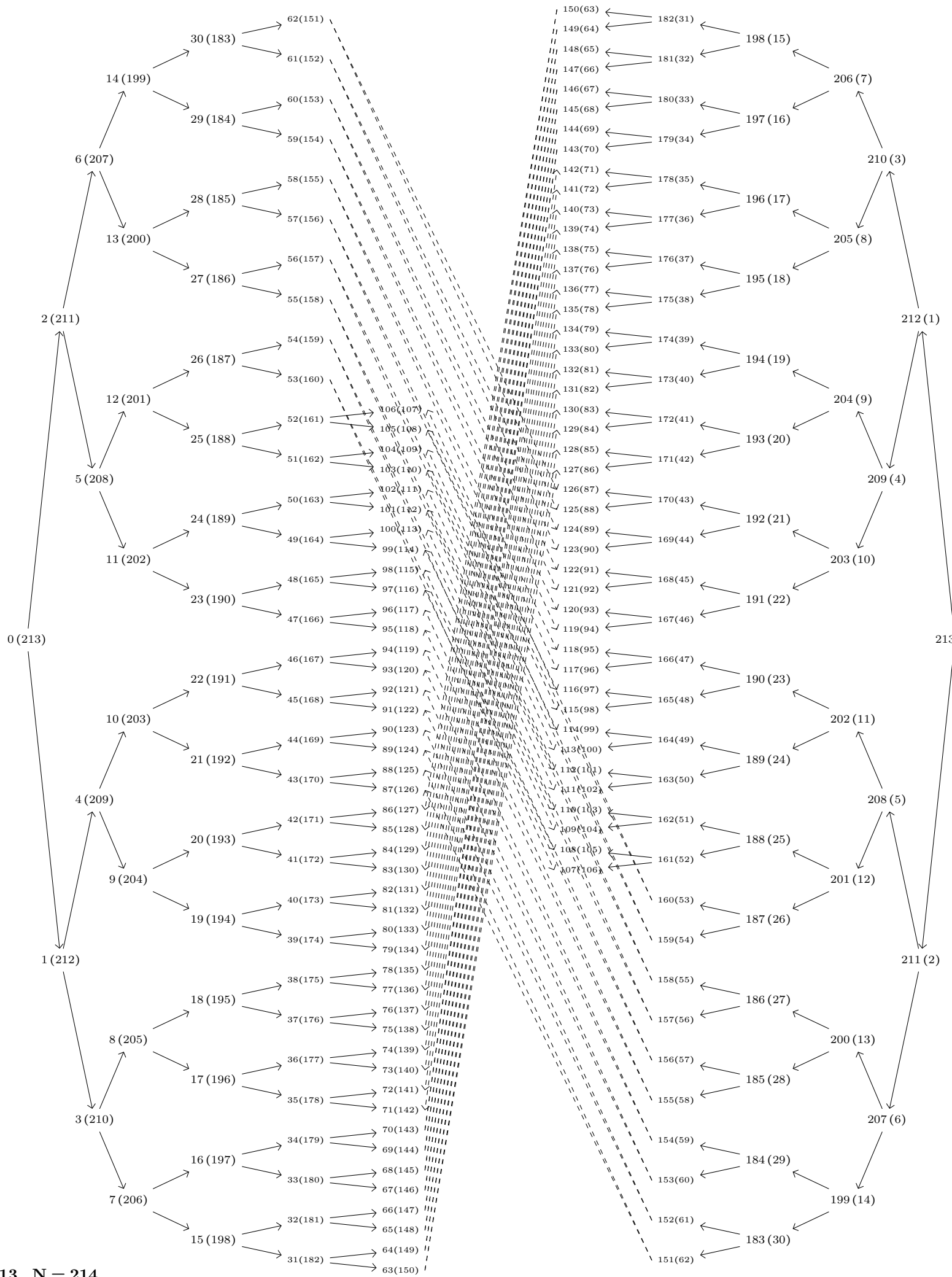




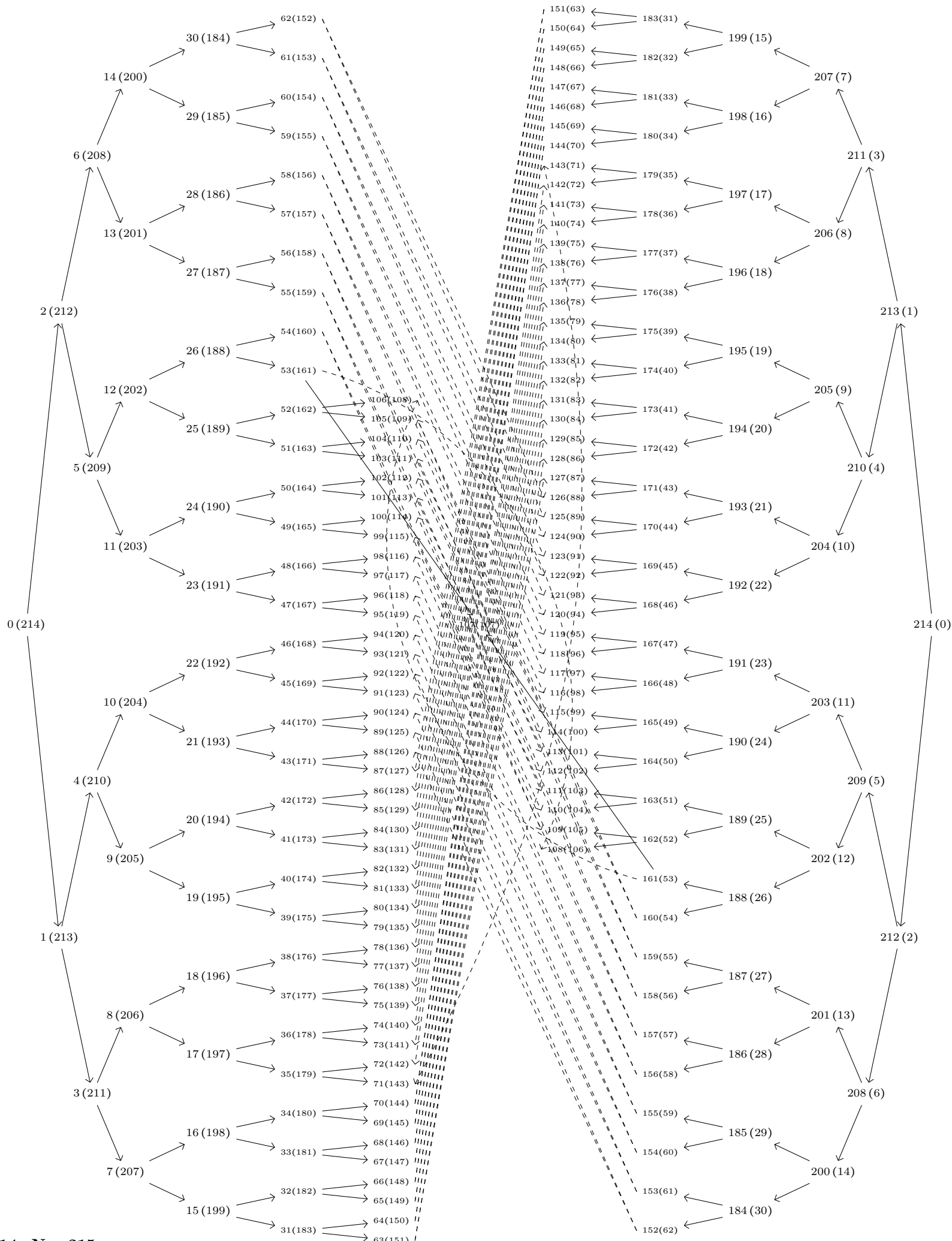




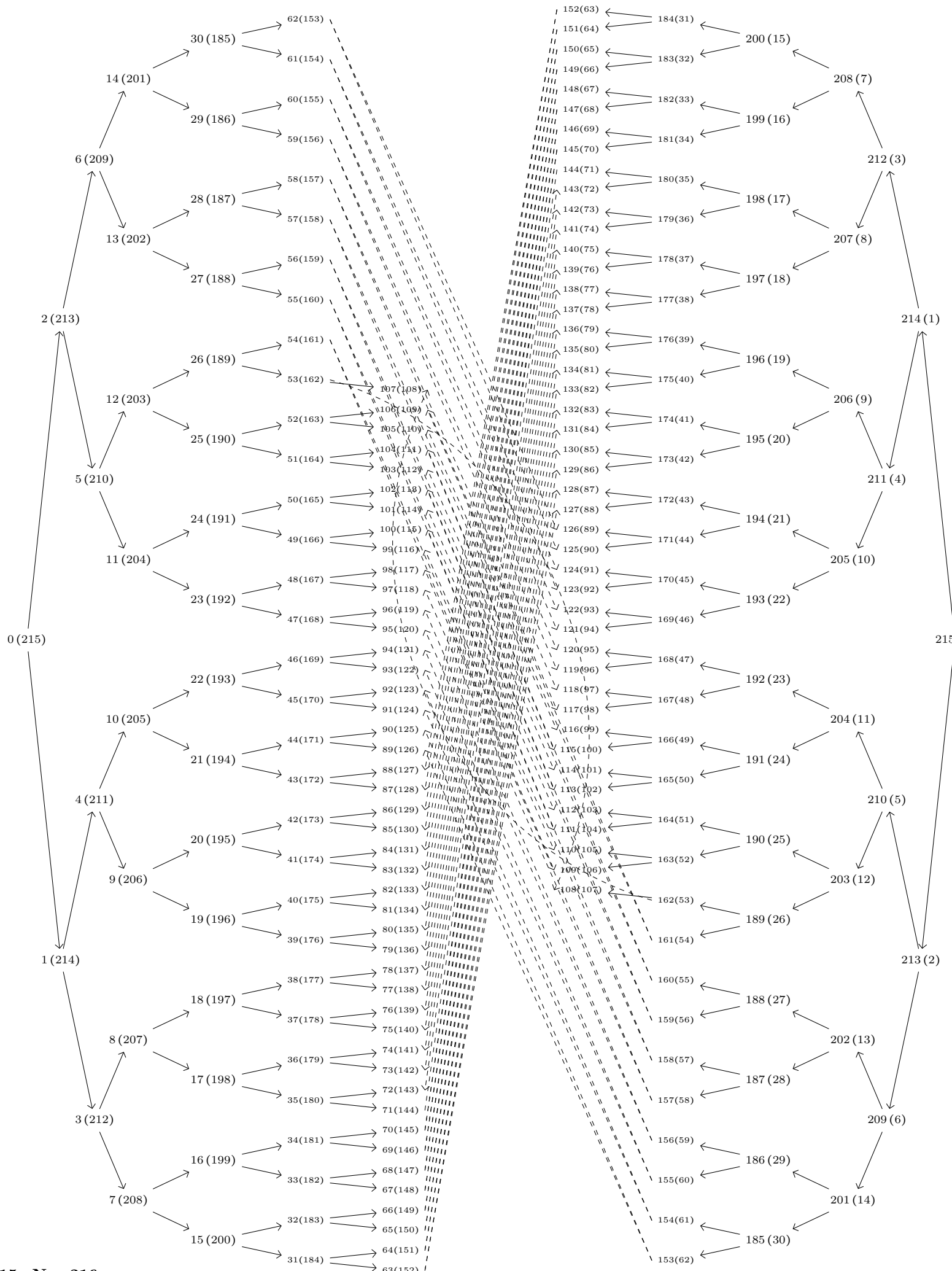




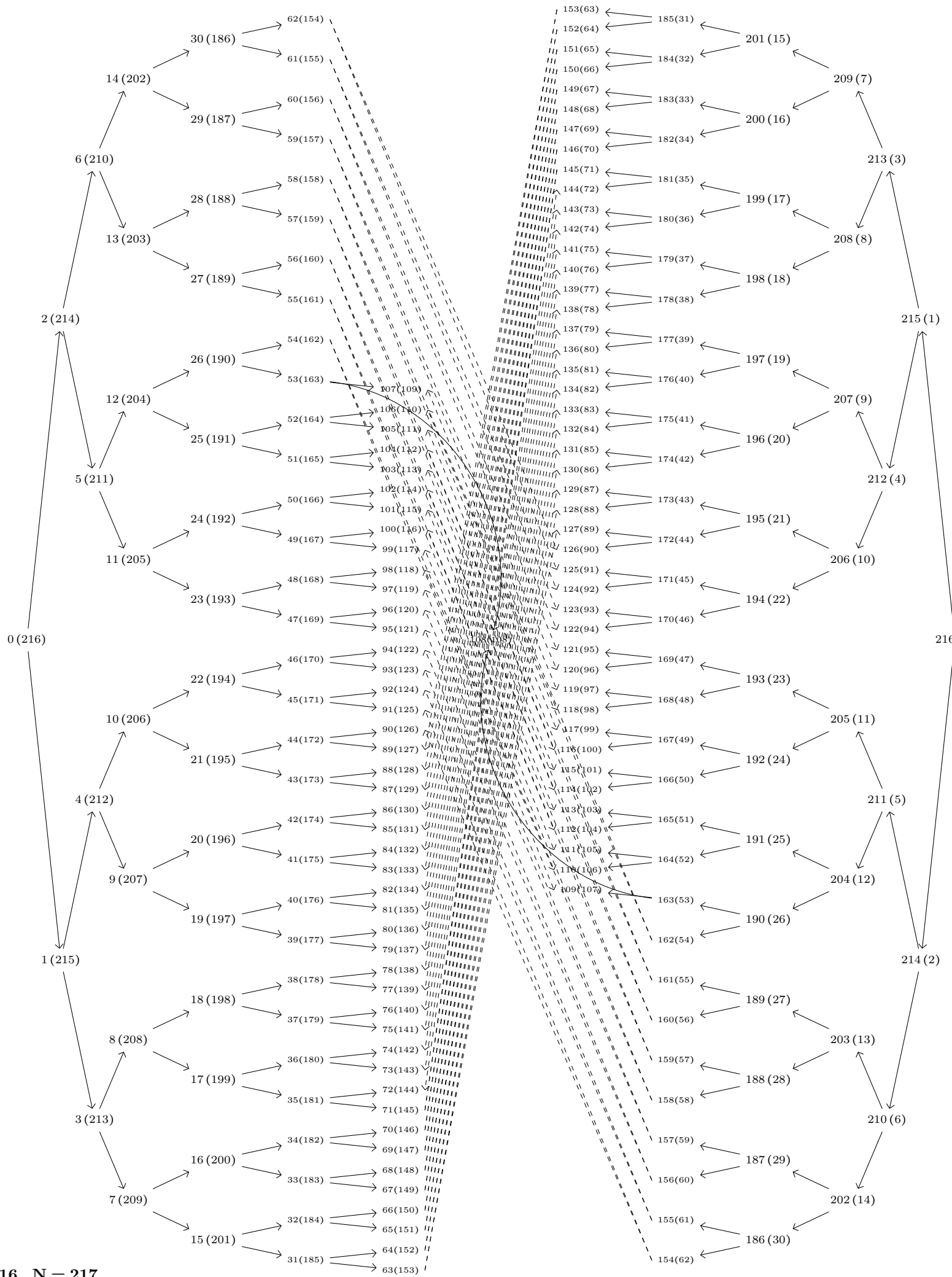
213. N = 214.



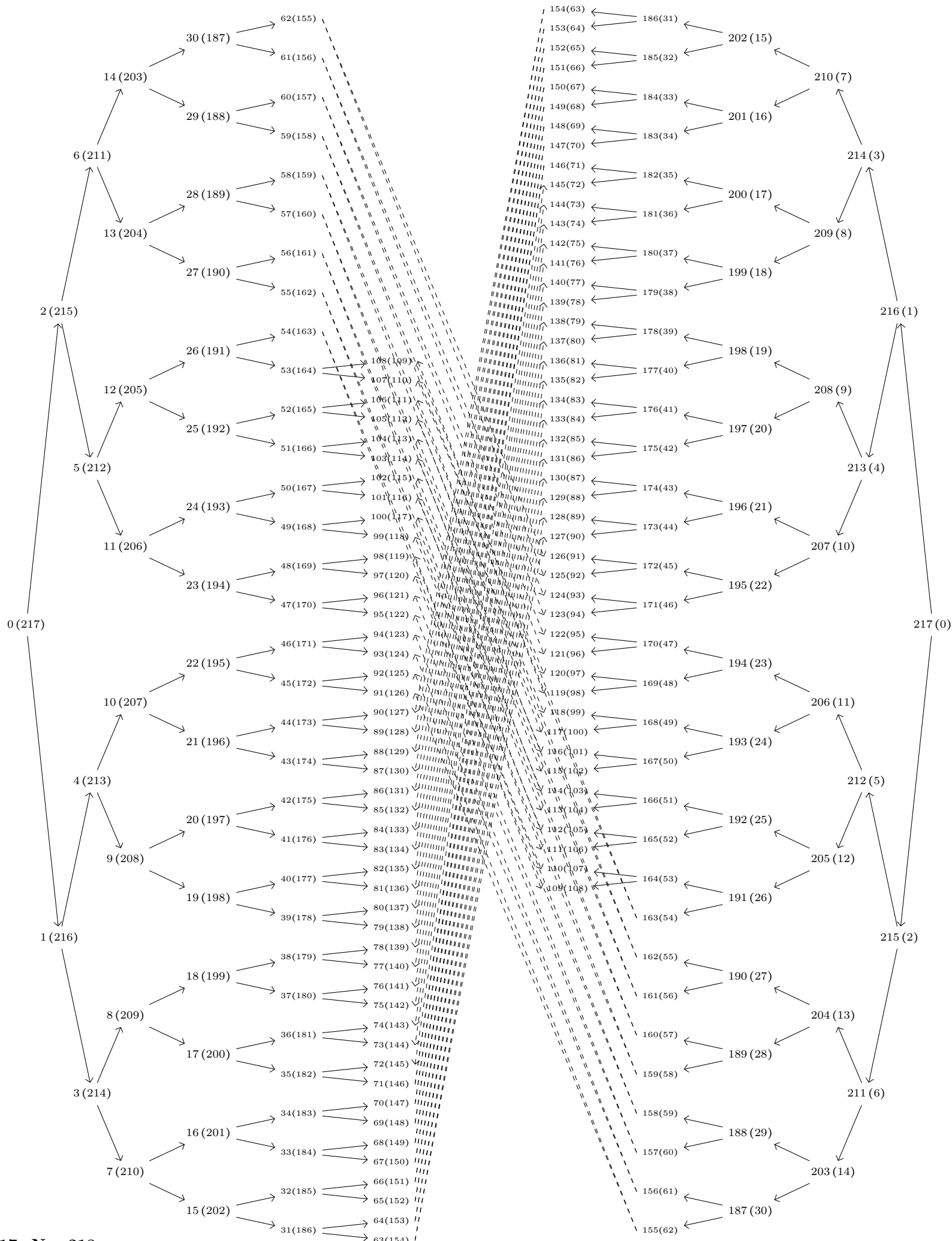
214. N = 215.

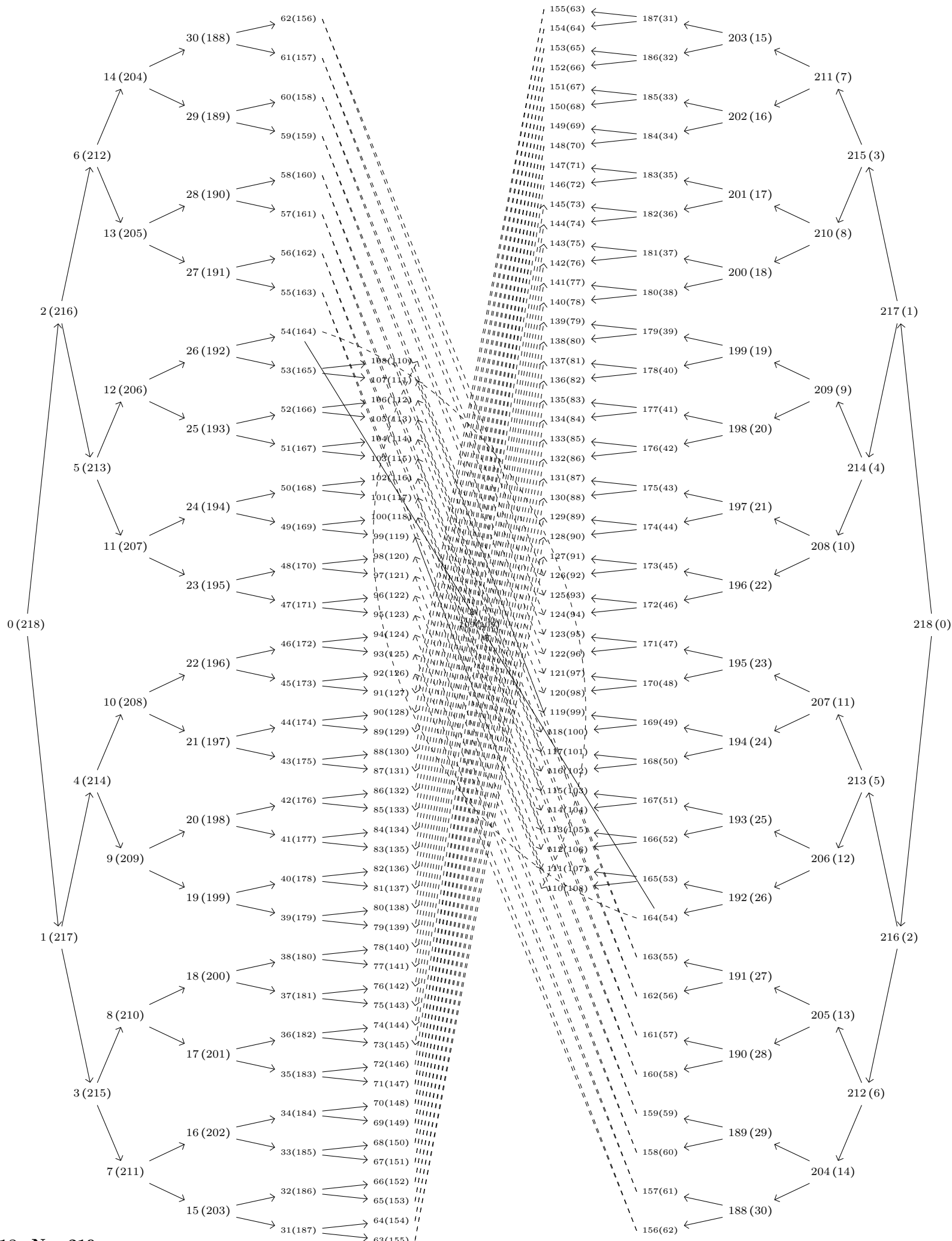


215. N = 216.

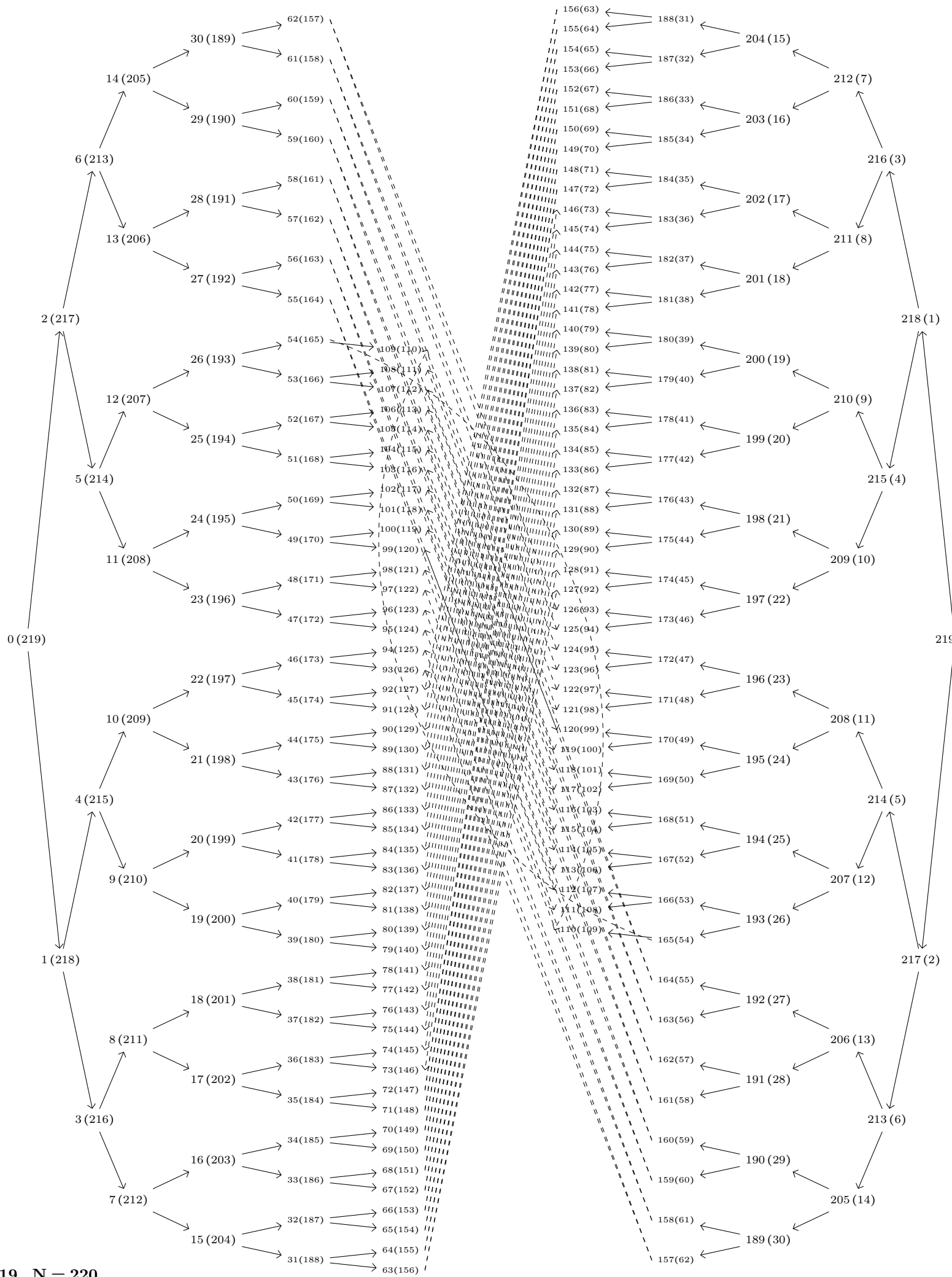


216. N = 217.





218. N = 219.



219. N = 220.

