Beyond the Horizon

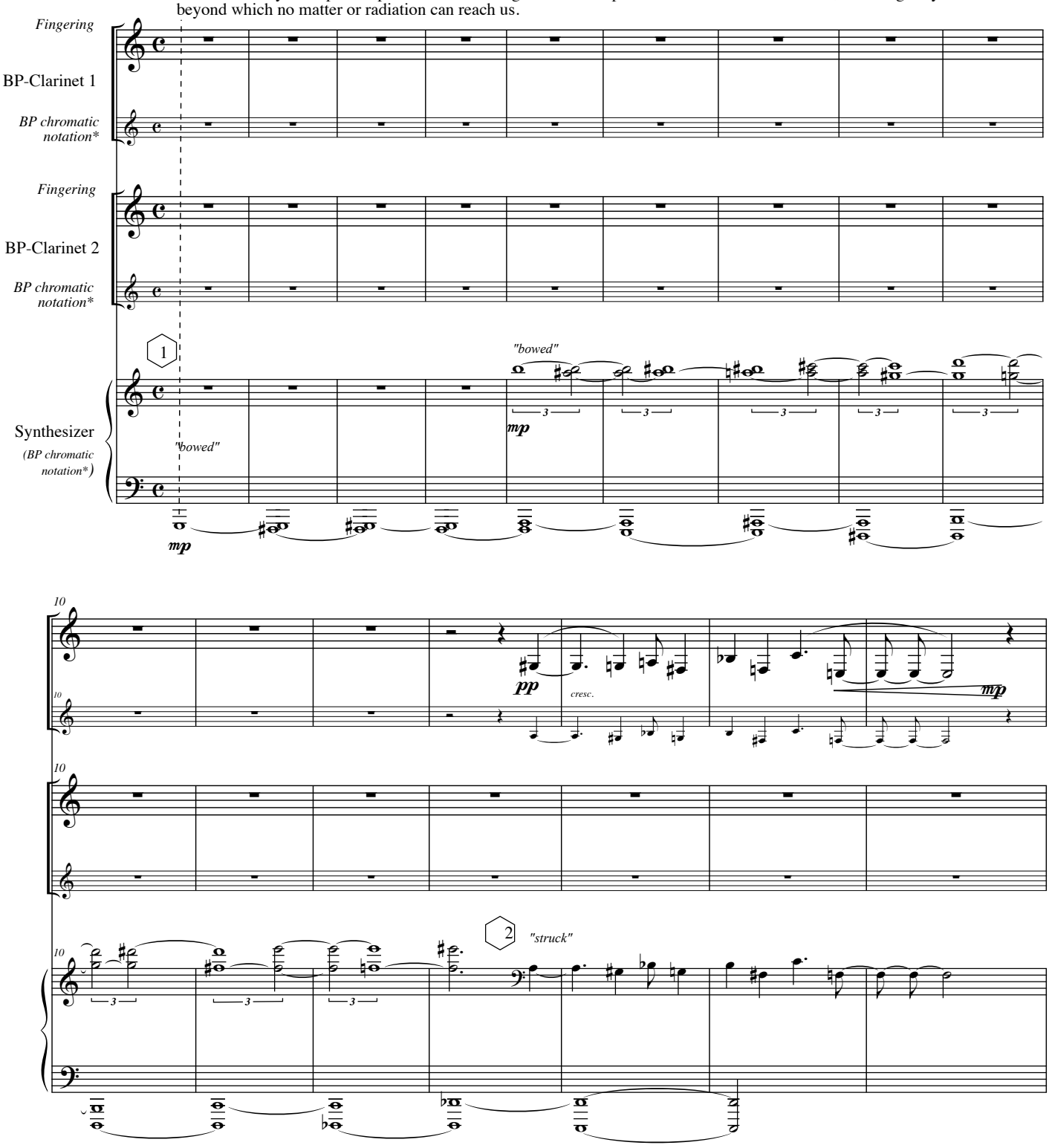
for 2 clarinets and synthesizer
in Bohlen-Pierce tuning

Georg Hajdu

Preset Number: 0

It is hard to think of an area of intellectual inquiry that has changed more in the past century than cosmology, and the shift has transformed how we view the world. We may be living in the only epoch in the history of the universe when scientists can achieve an accurate understanding of the true nature of the universe. A dramatic discovery almost a decade ago motivated our study. Two different groups of astronomers traced the expansion of the universe over the past five billion years and found that it appears to be speeding up. The source of this cosmic antigravity is thought to be some new form of "dark energy" associated with empty space.

Dark energy will have an enormous impact on the future of the universe. The prognosis: not good. Such a universe becomes a very inhospitable place. The cosmological constant produces a fixed "event horizon," an imaginary surface beyond which no matter or radiation can reach us.



* C4 = C +22 cents
F#4 = tuning pitch (442 Hz)

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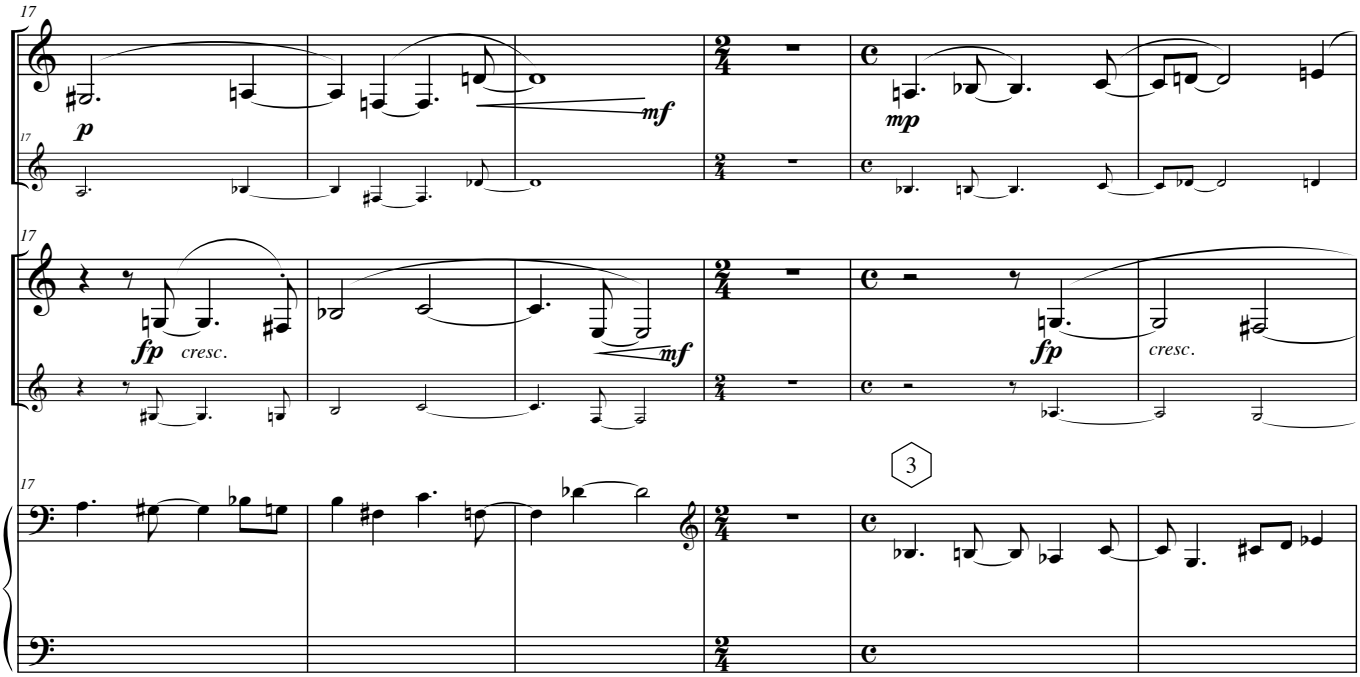
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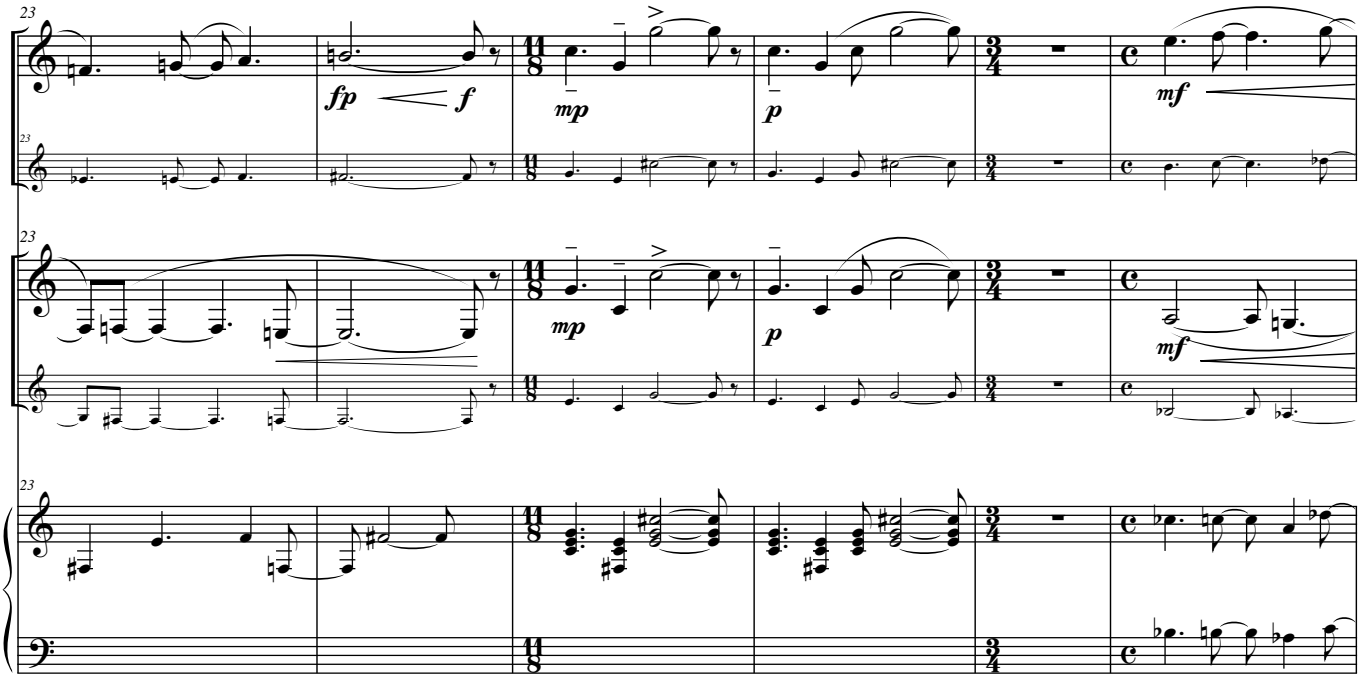
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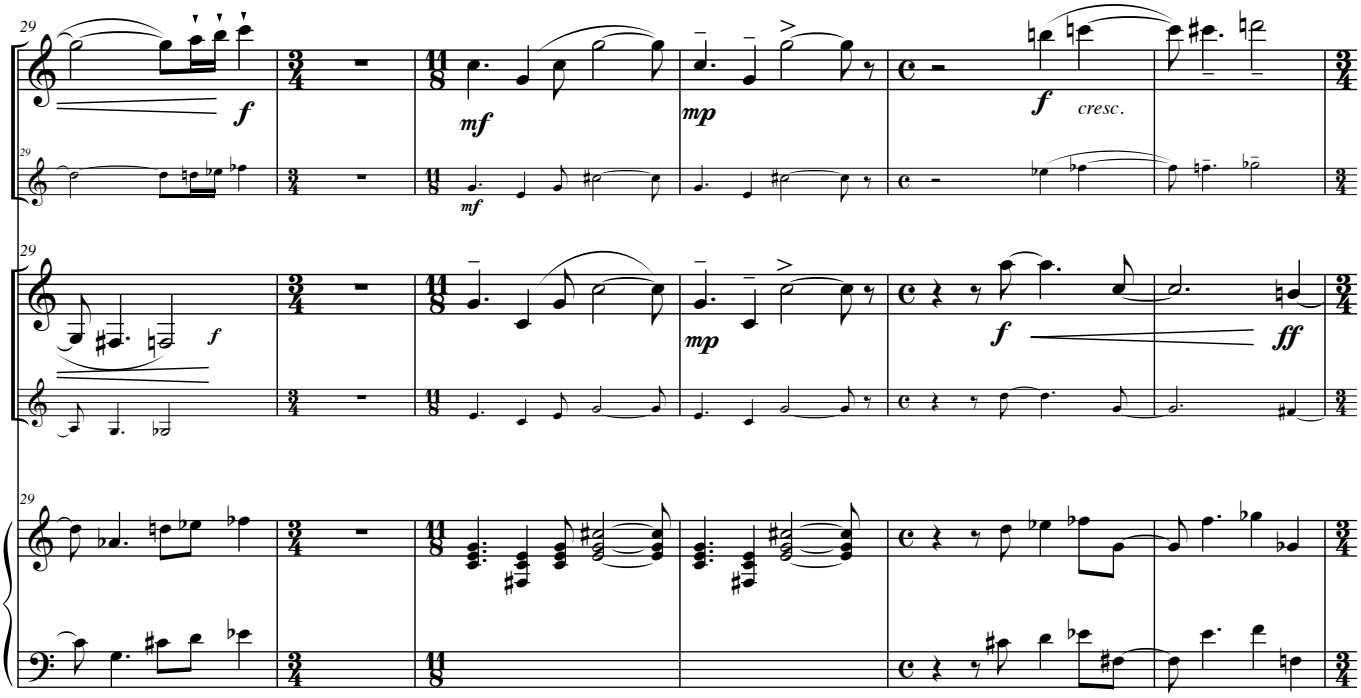
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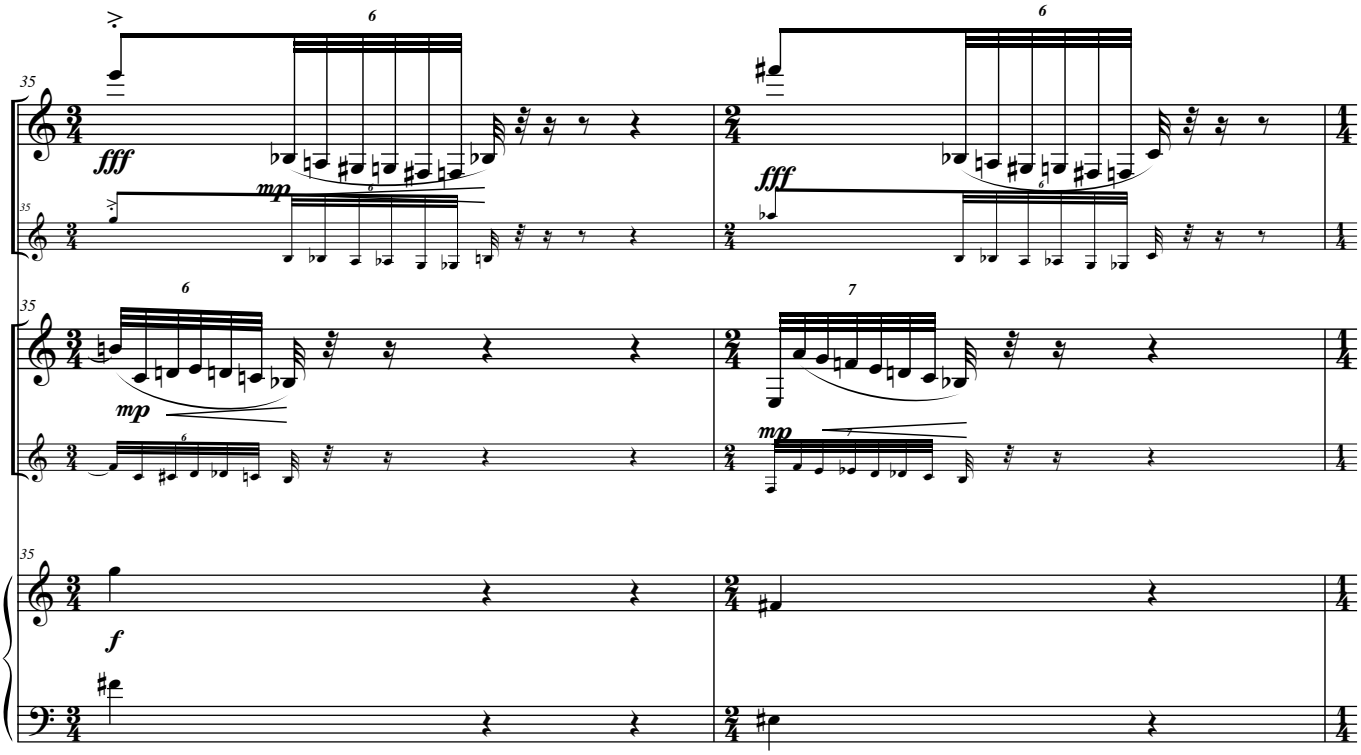
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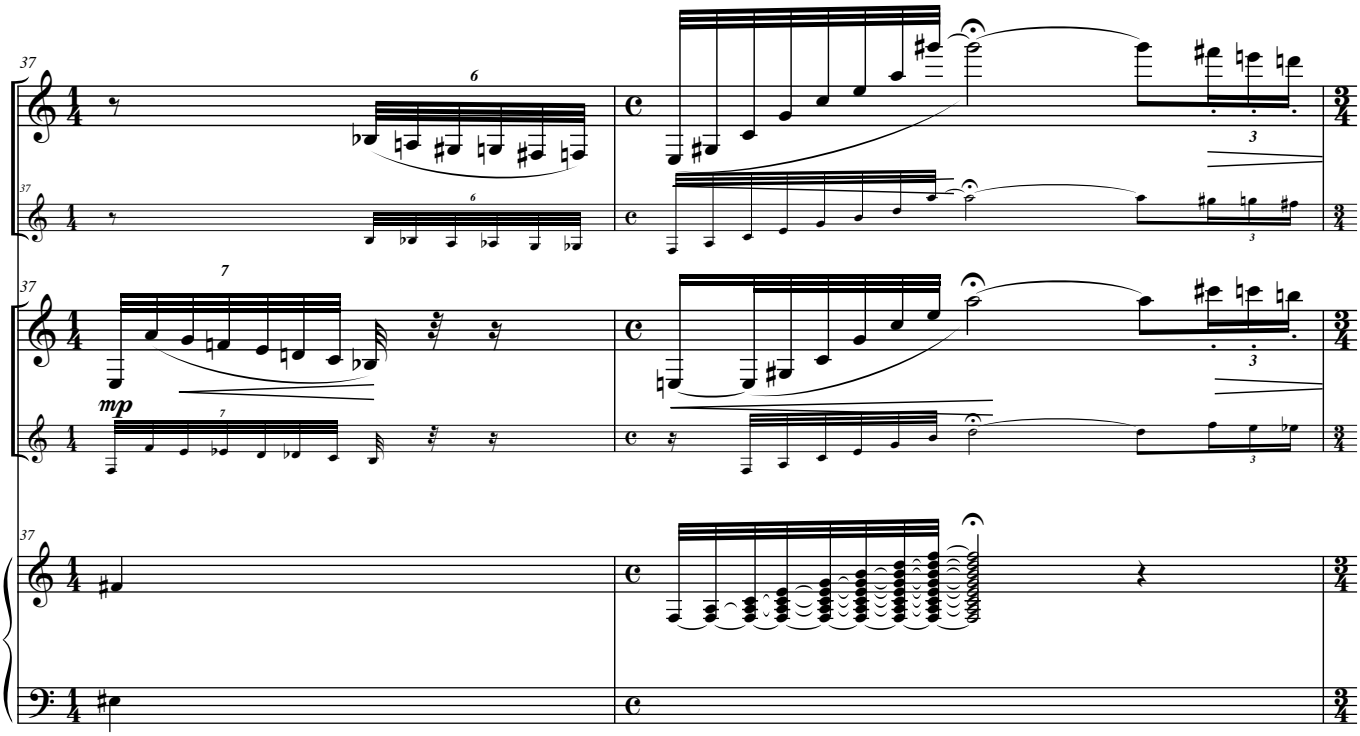
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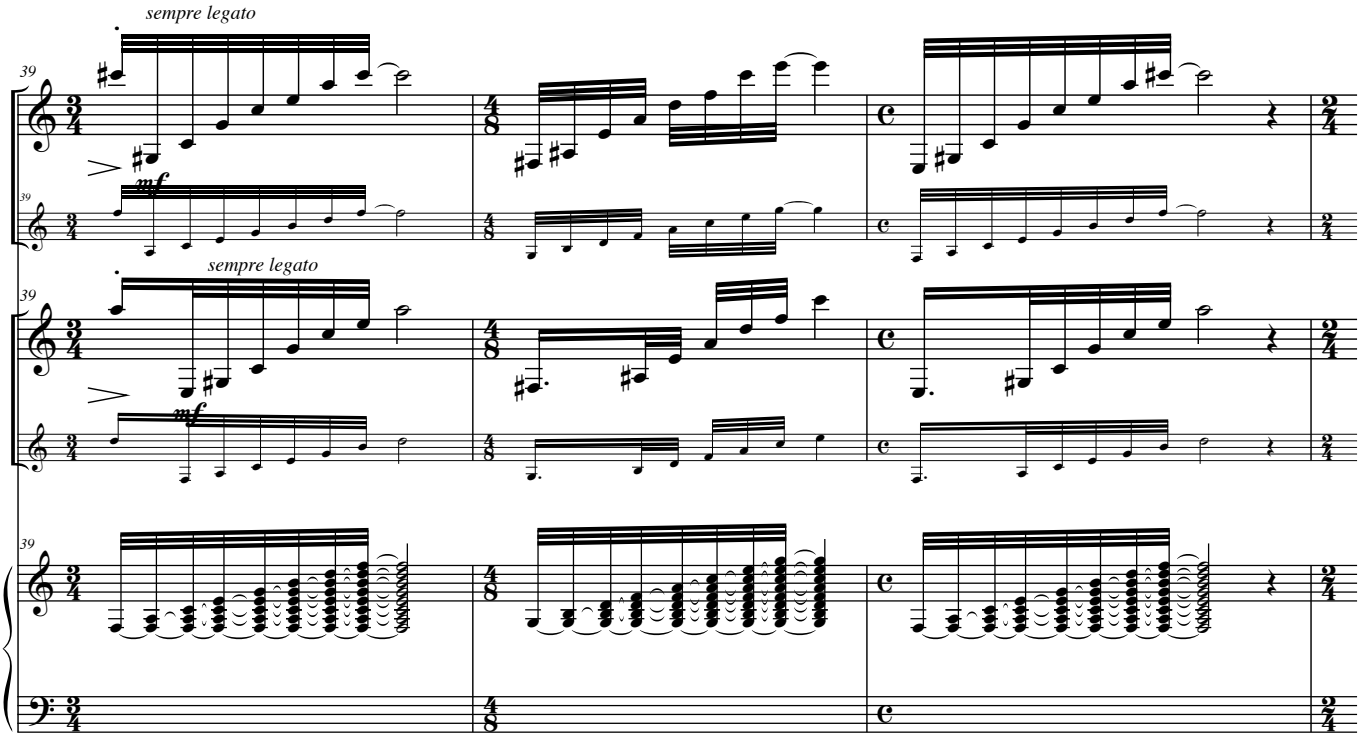
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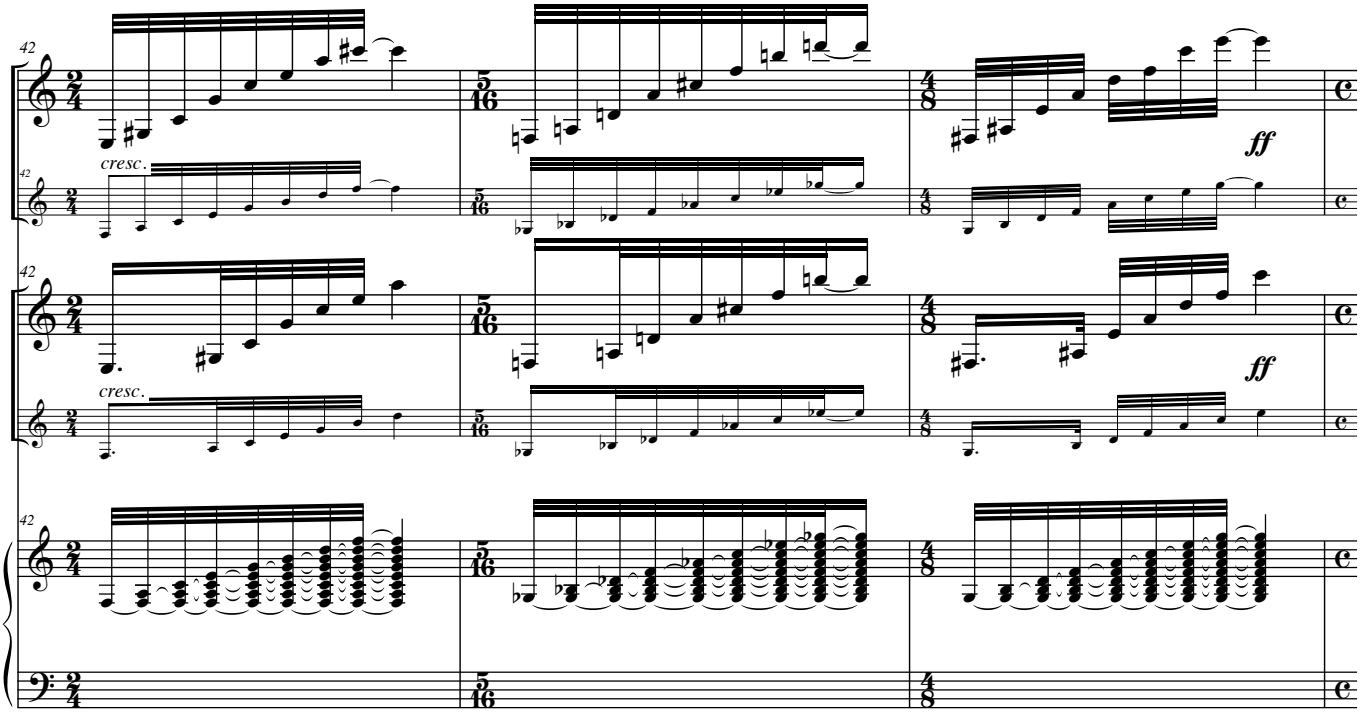
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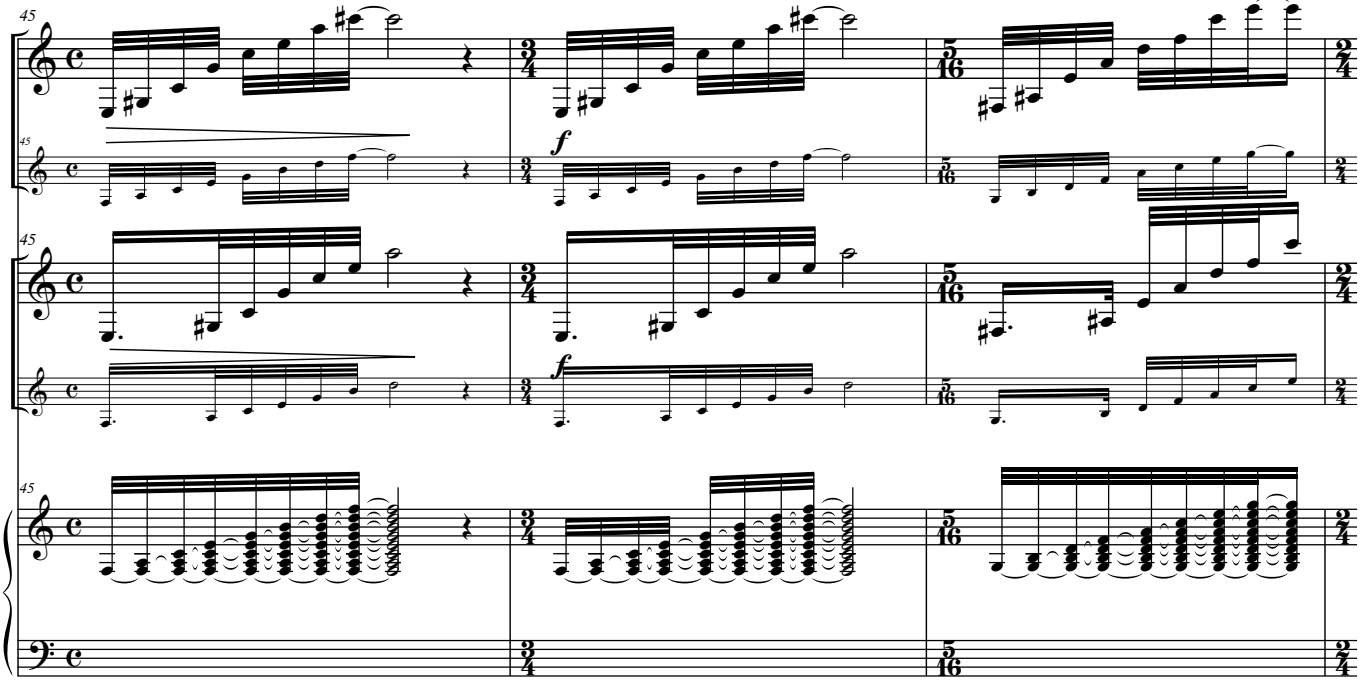
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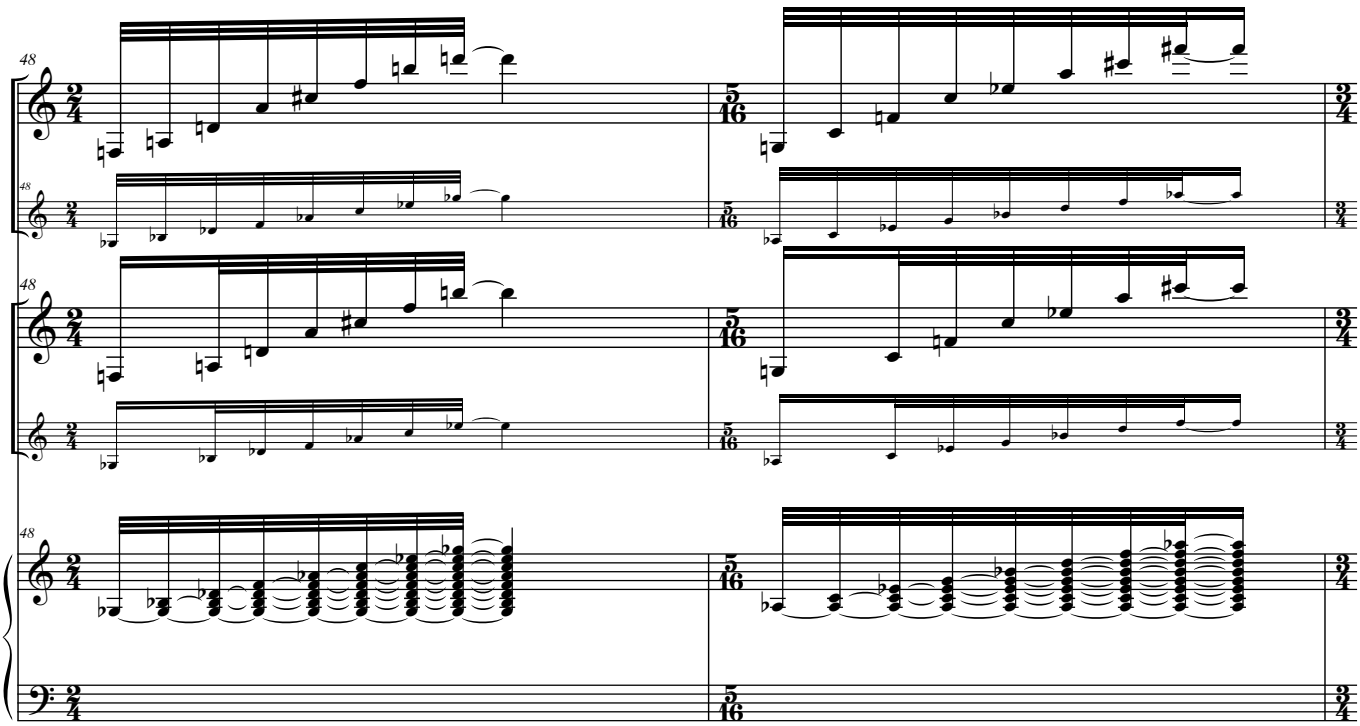

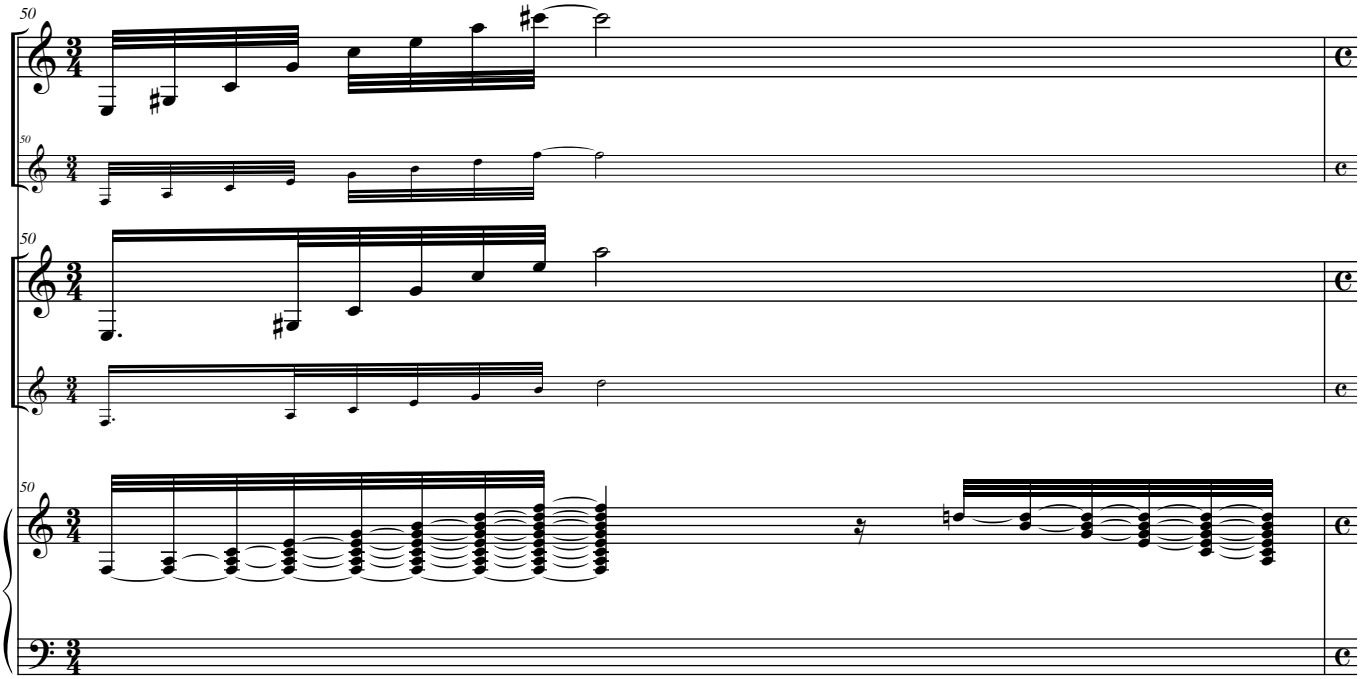

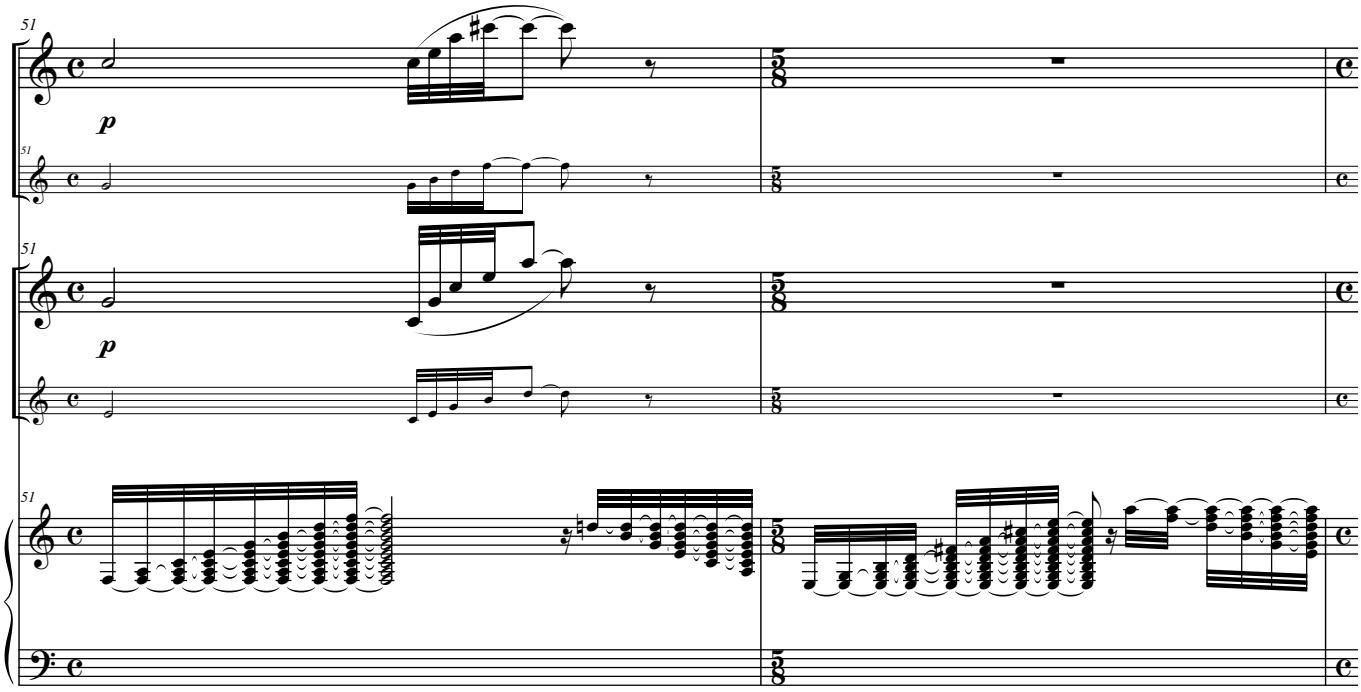
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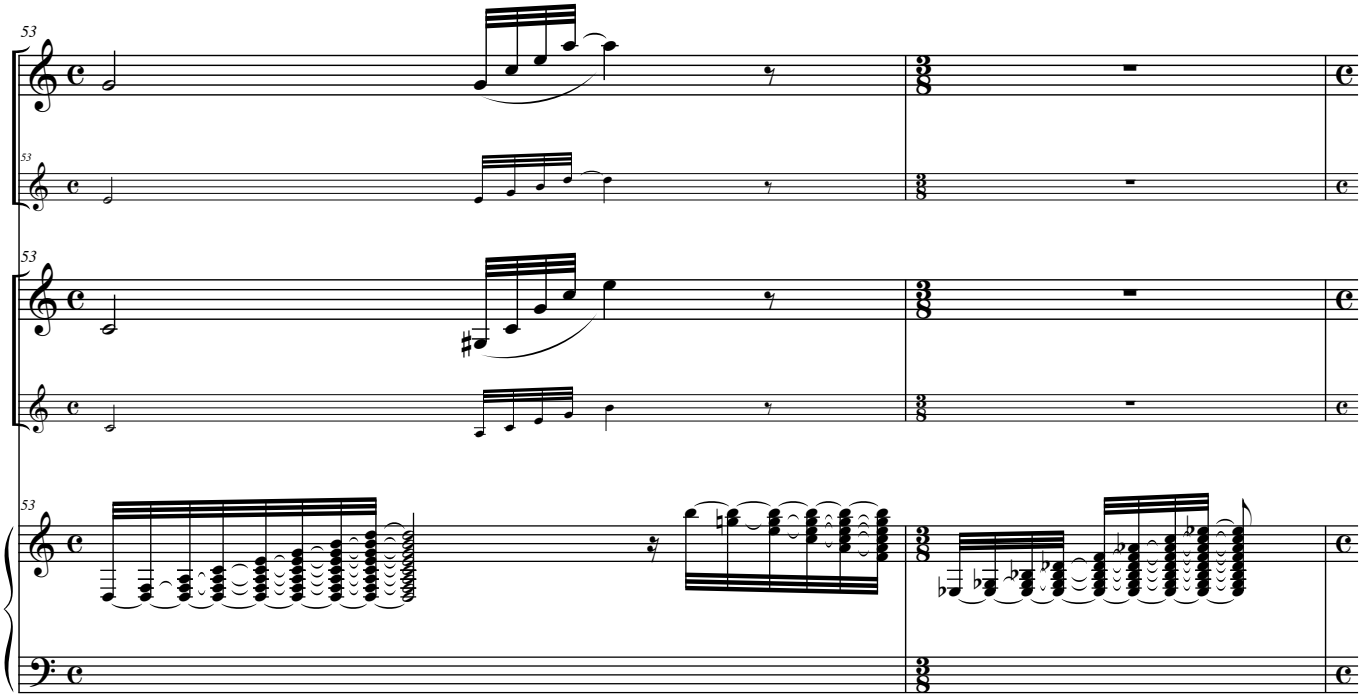
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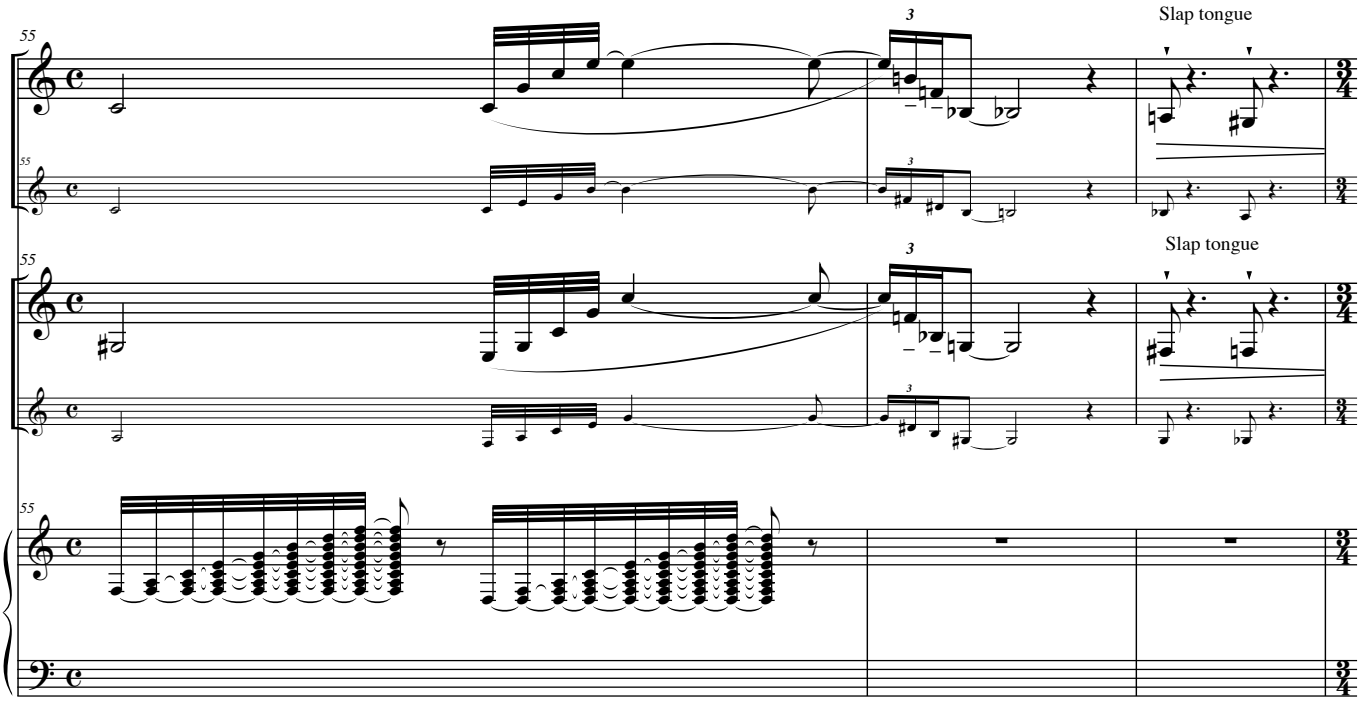
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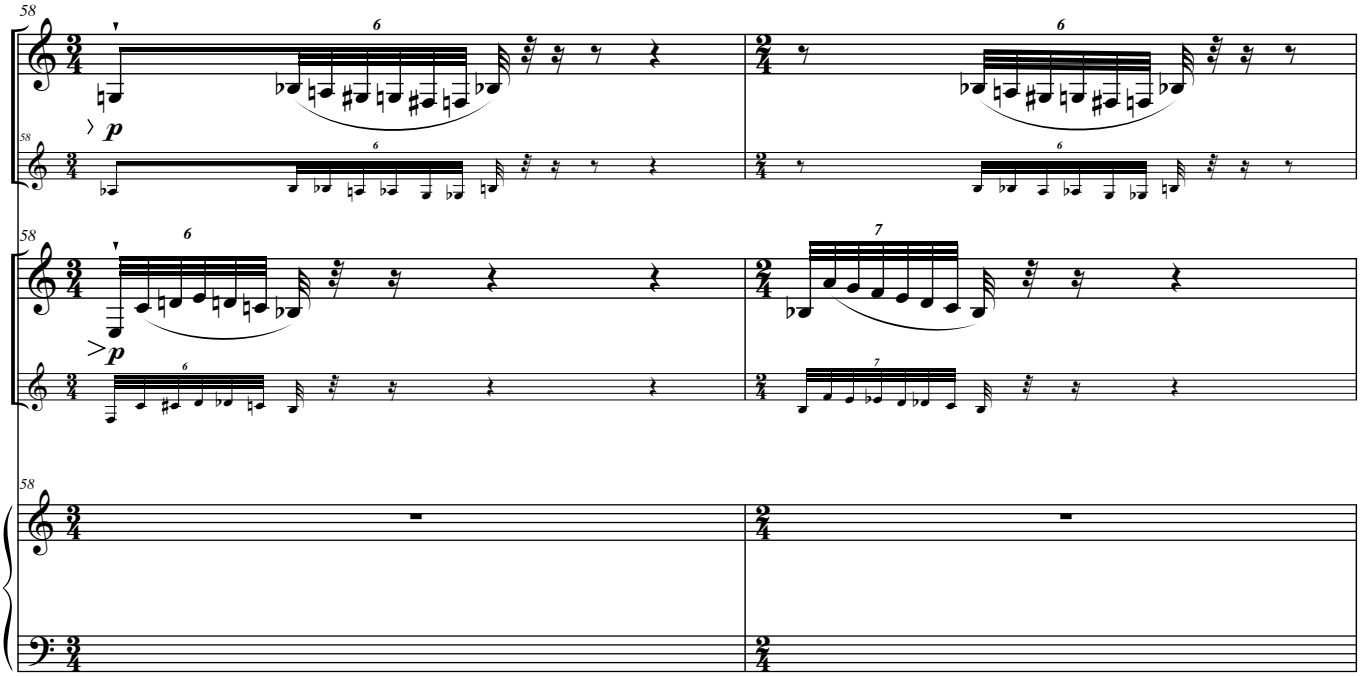
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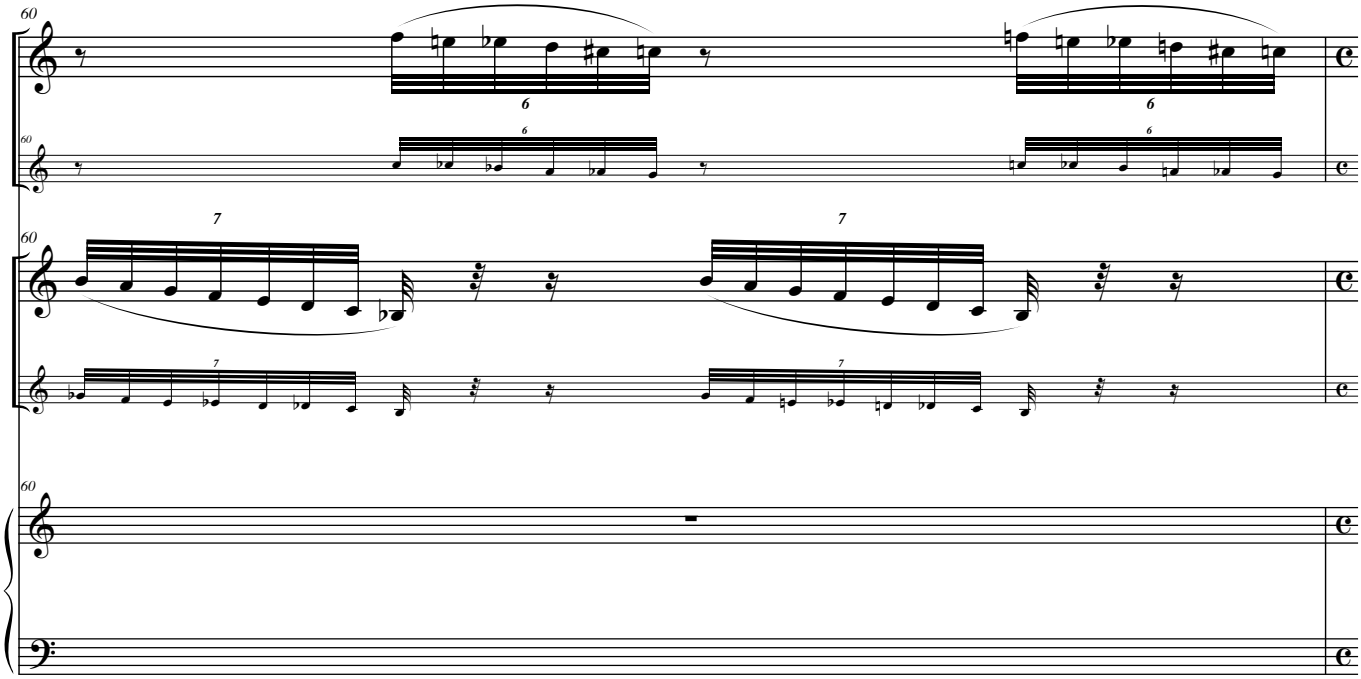

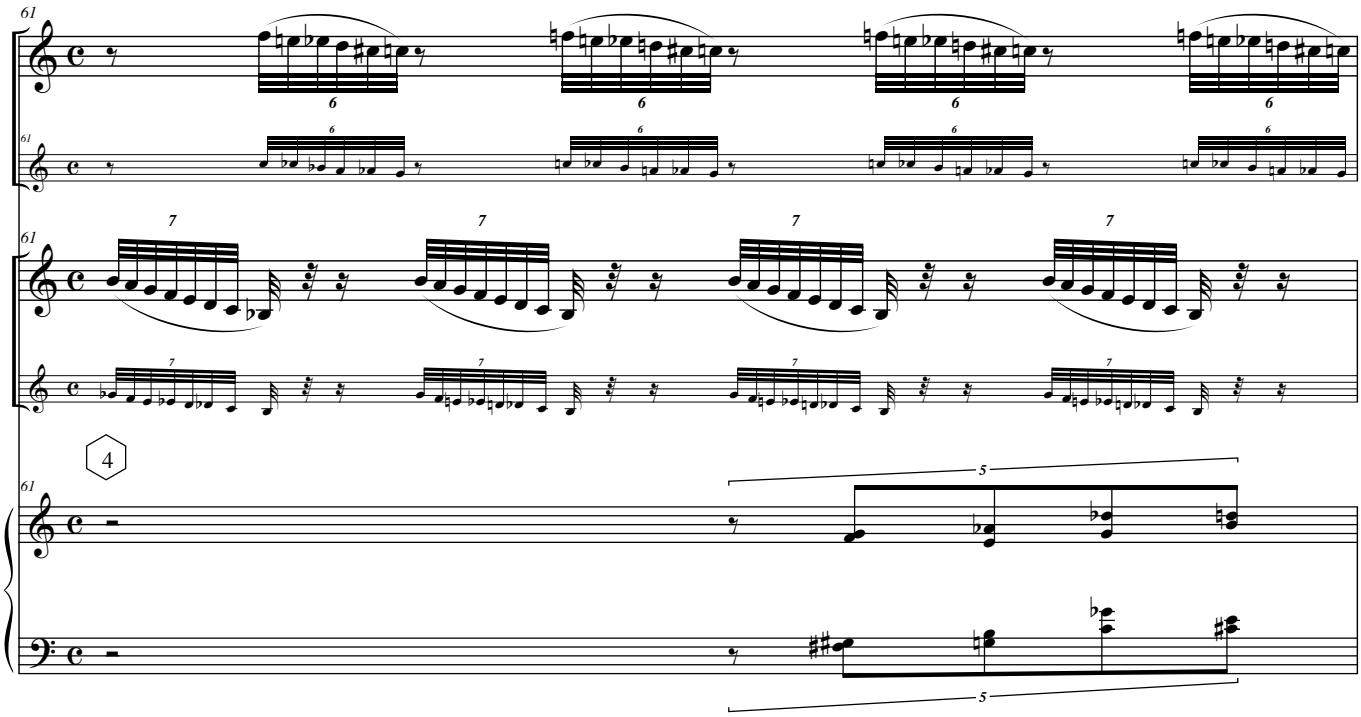
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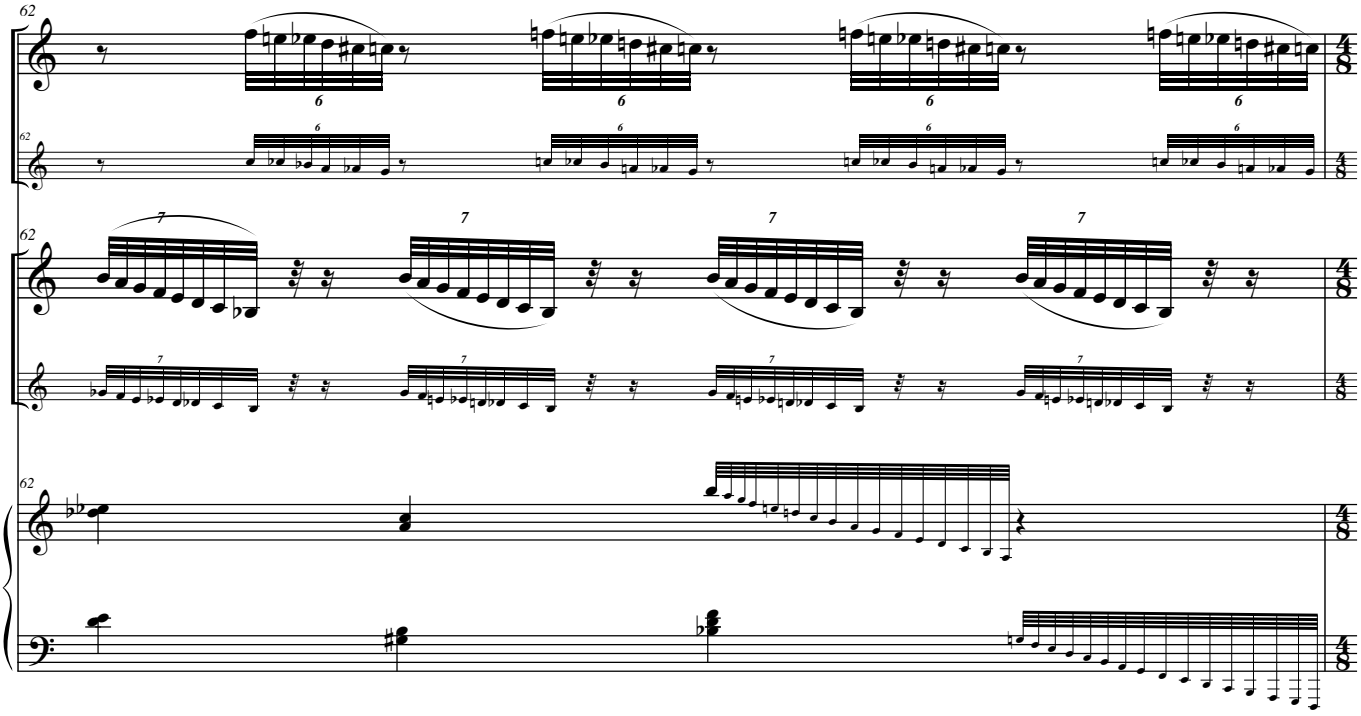

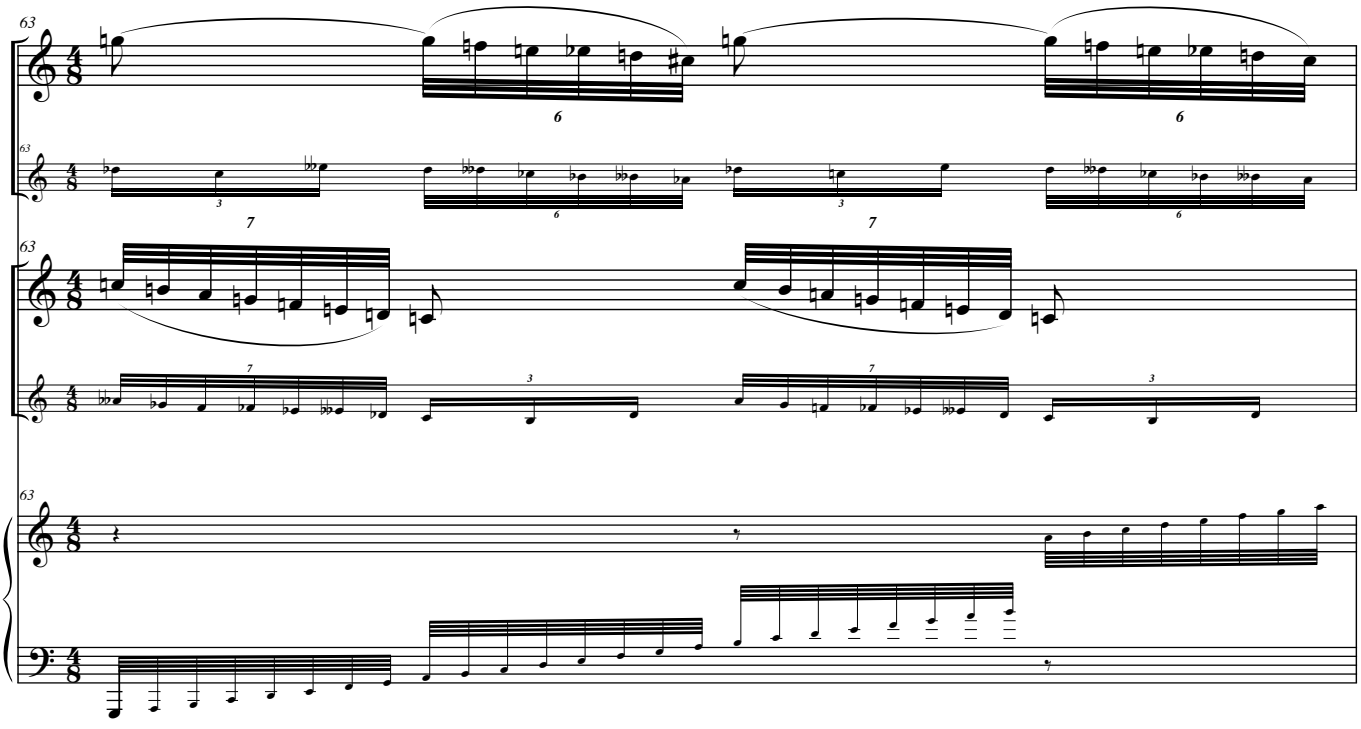

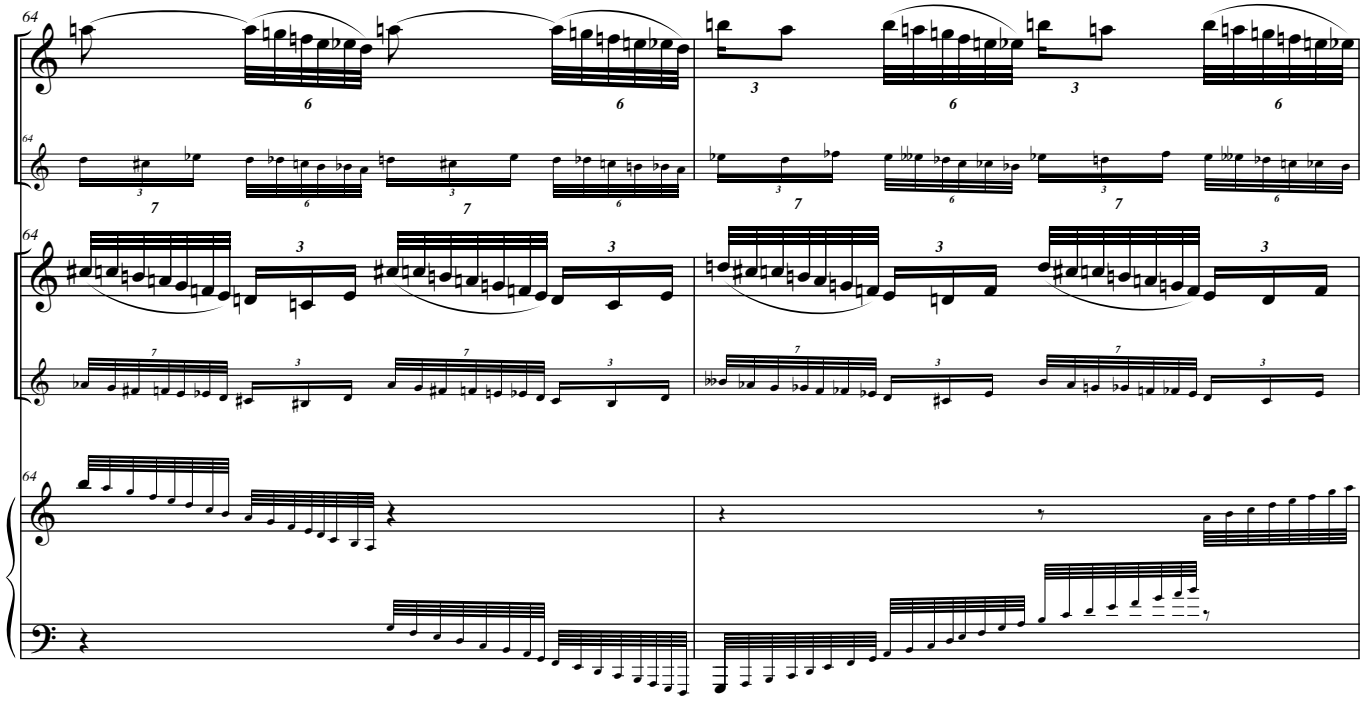

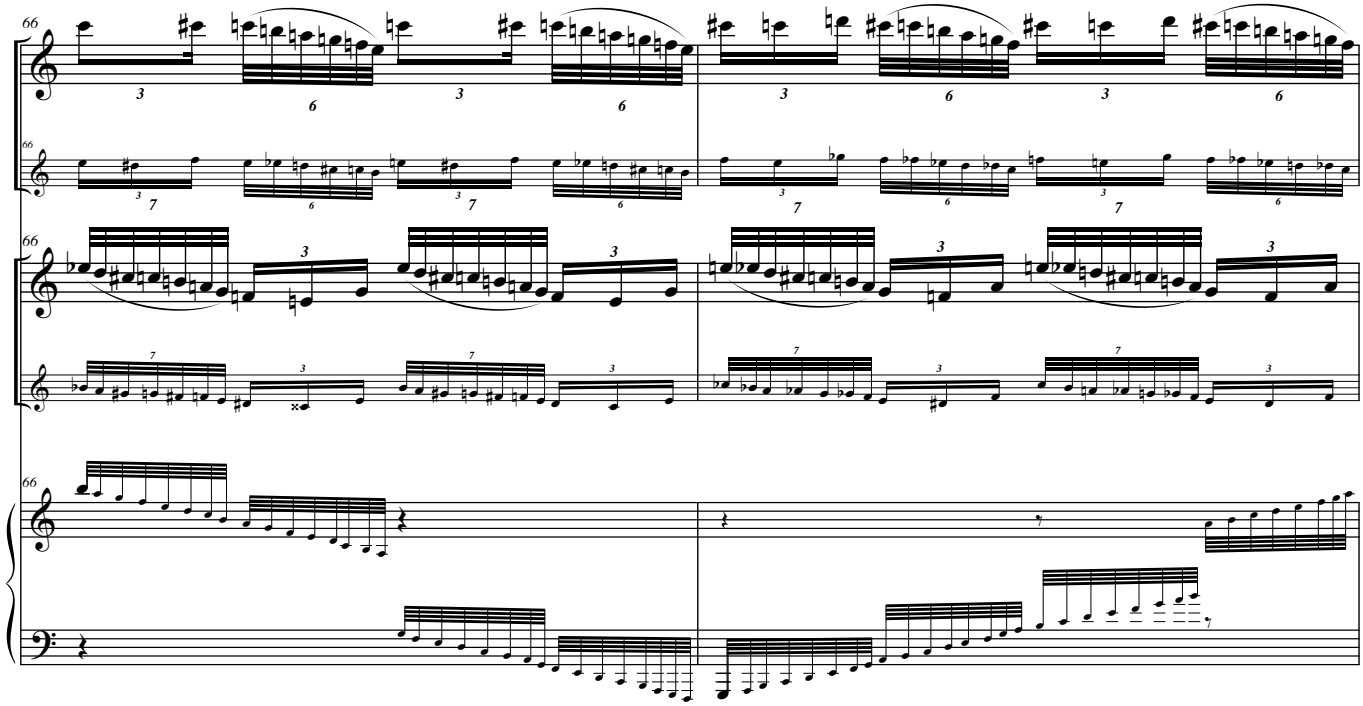

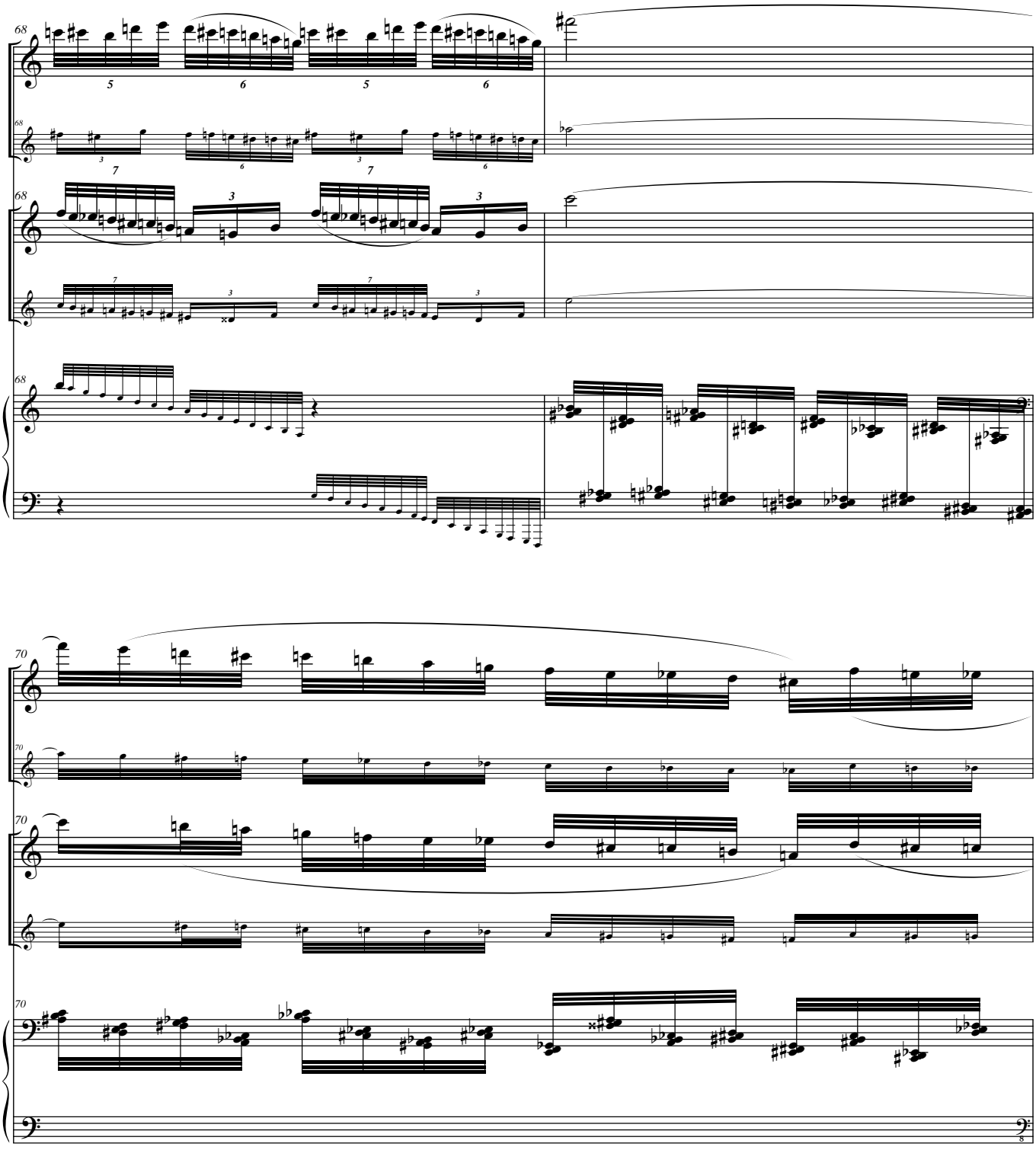

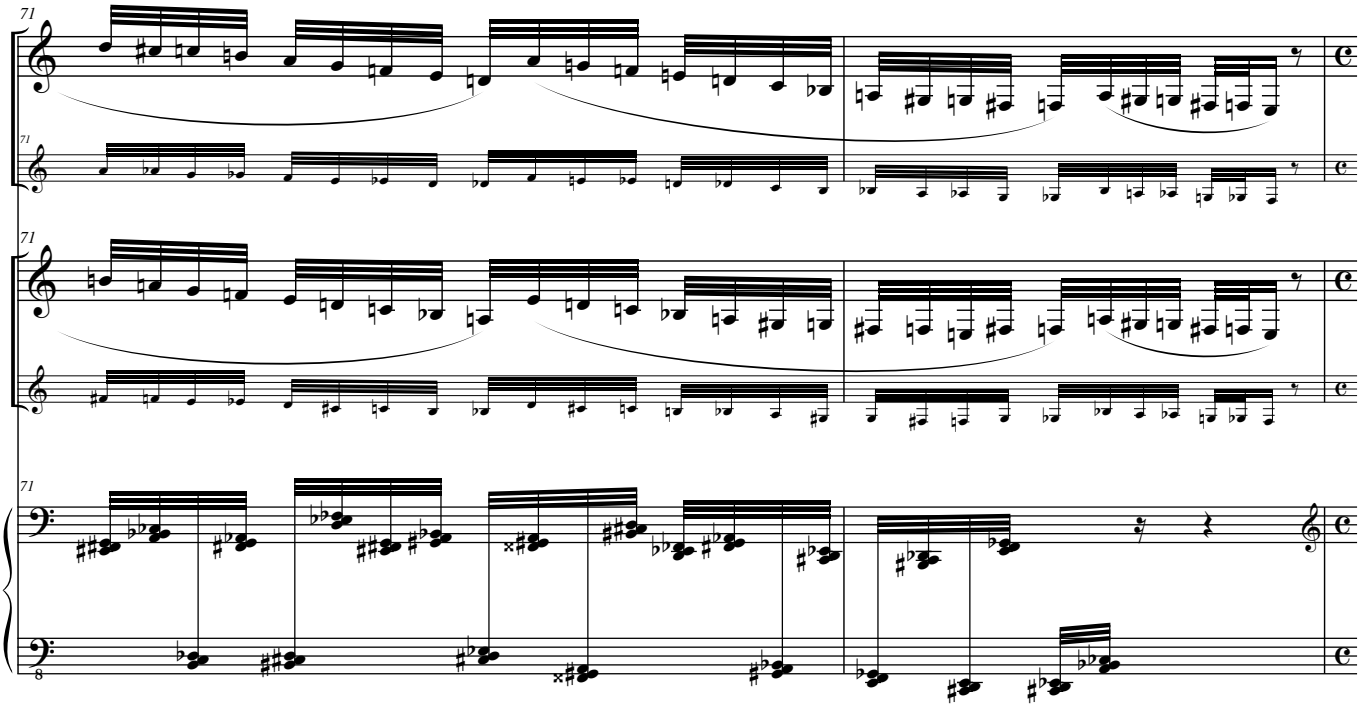
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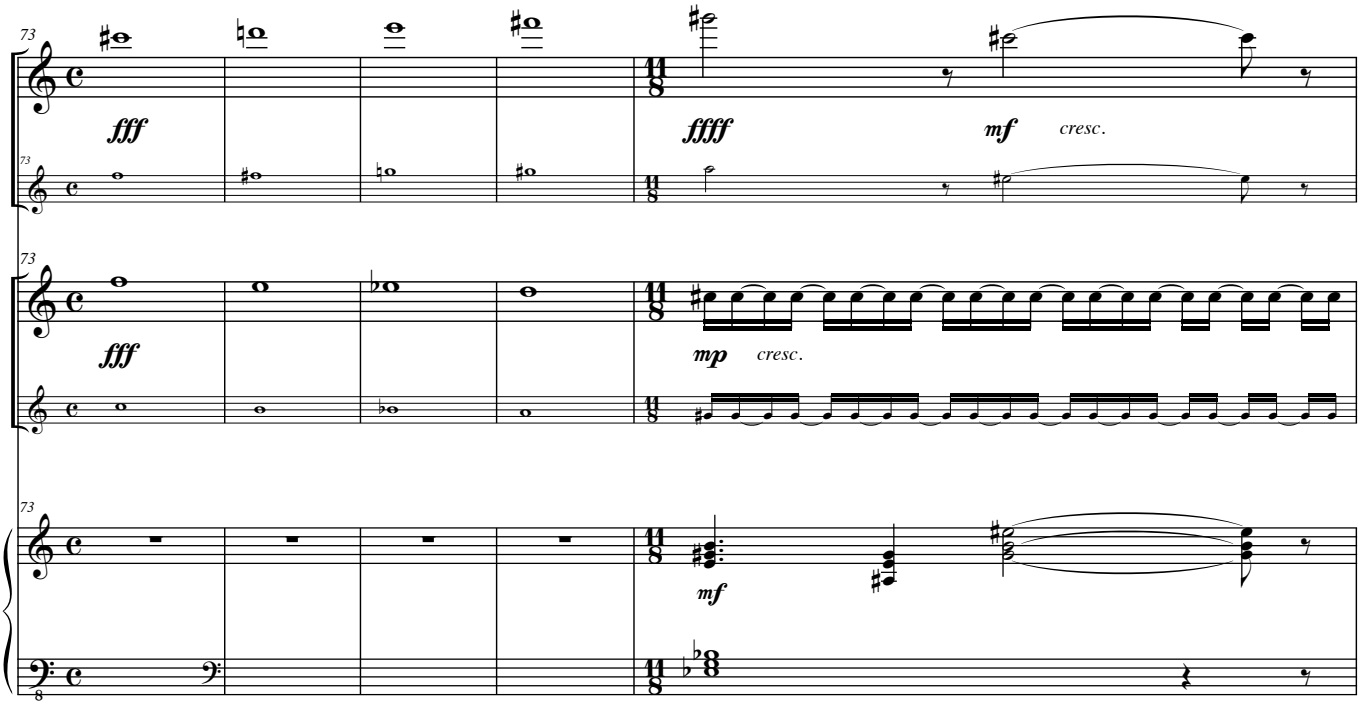
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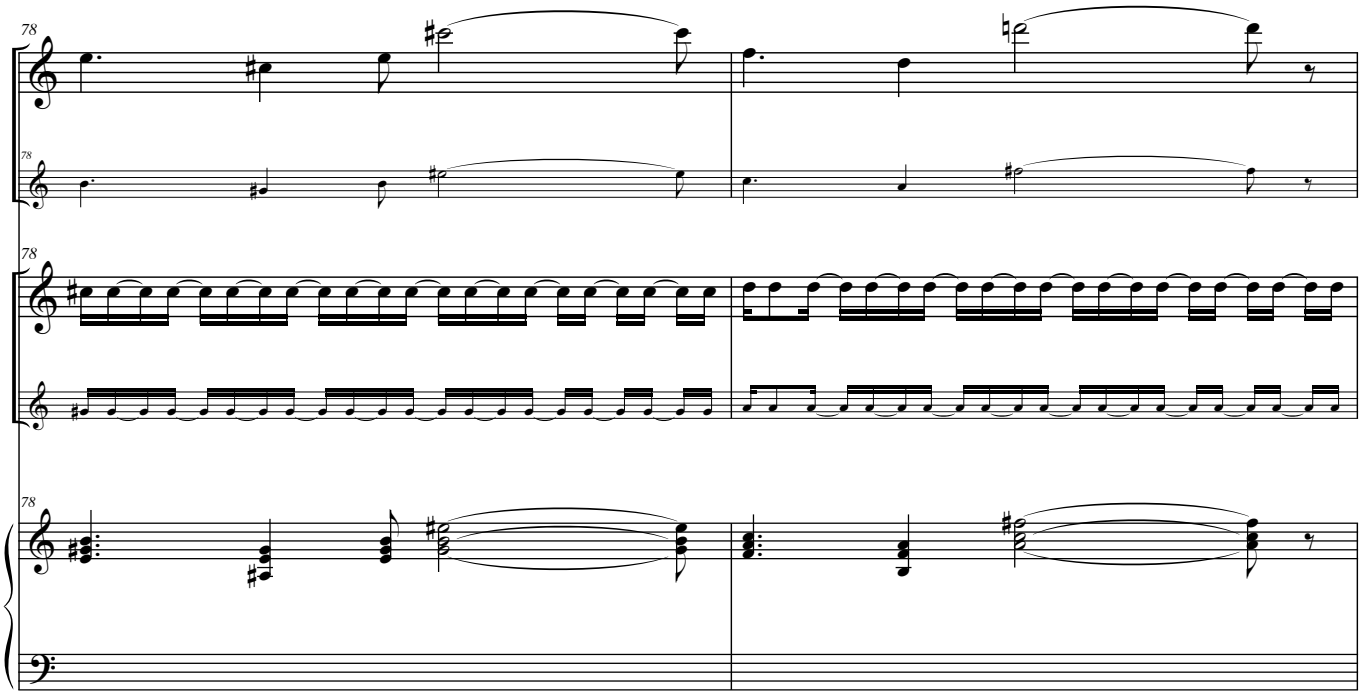
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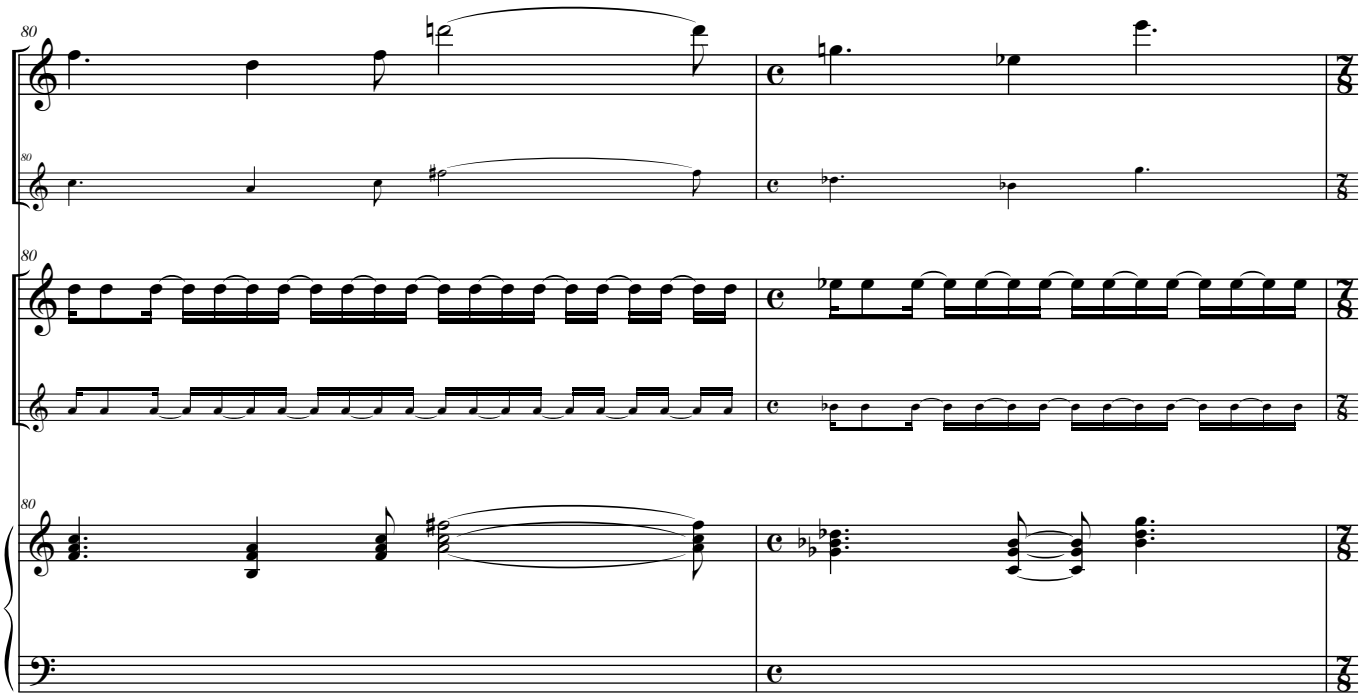
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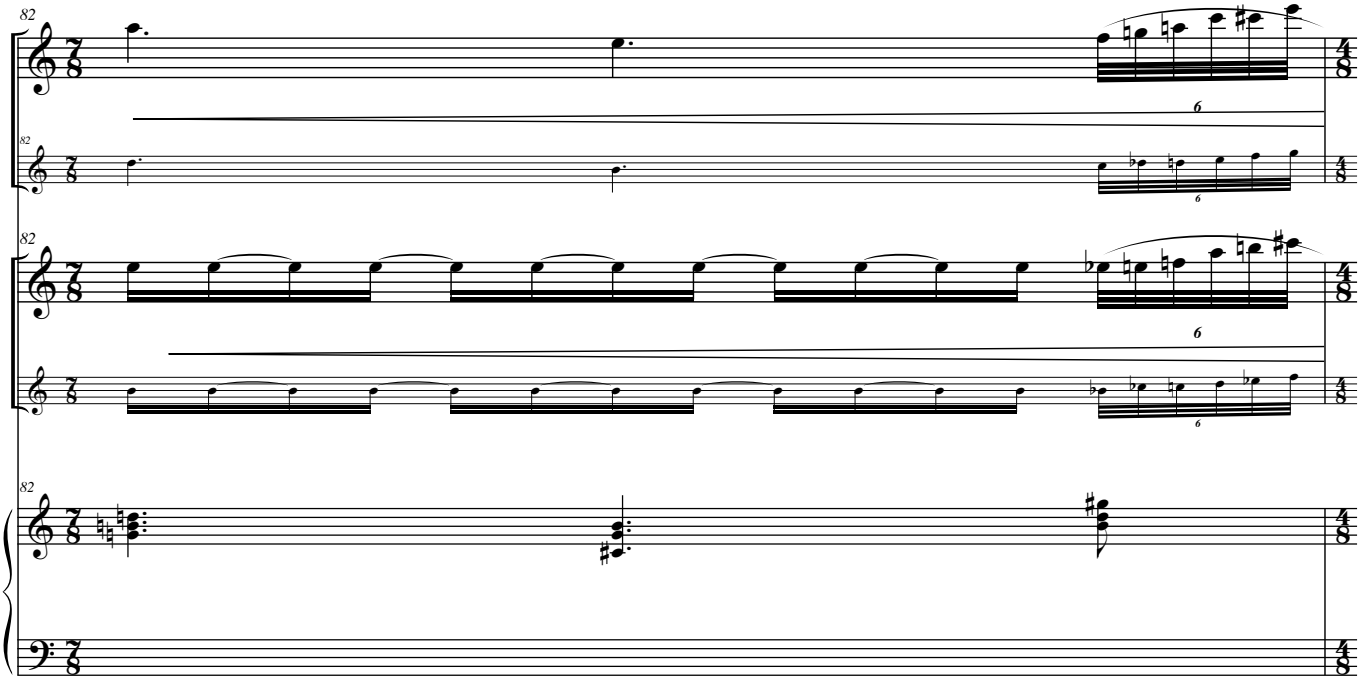
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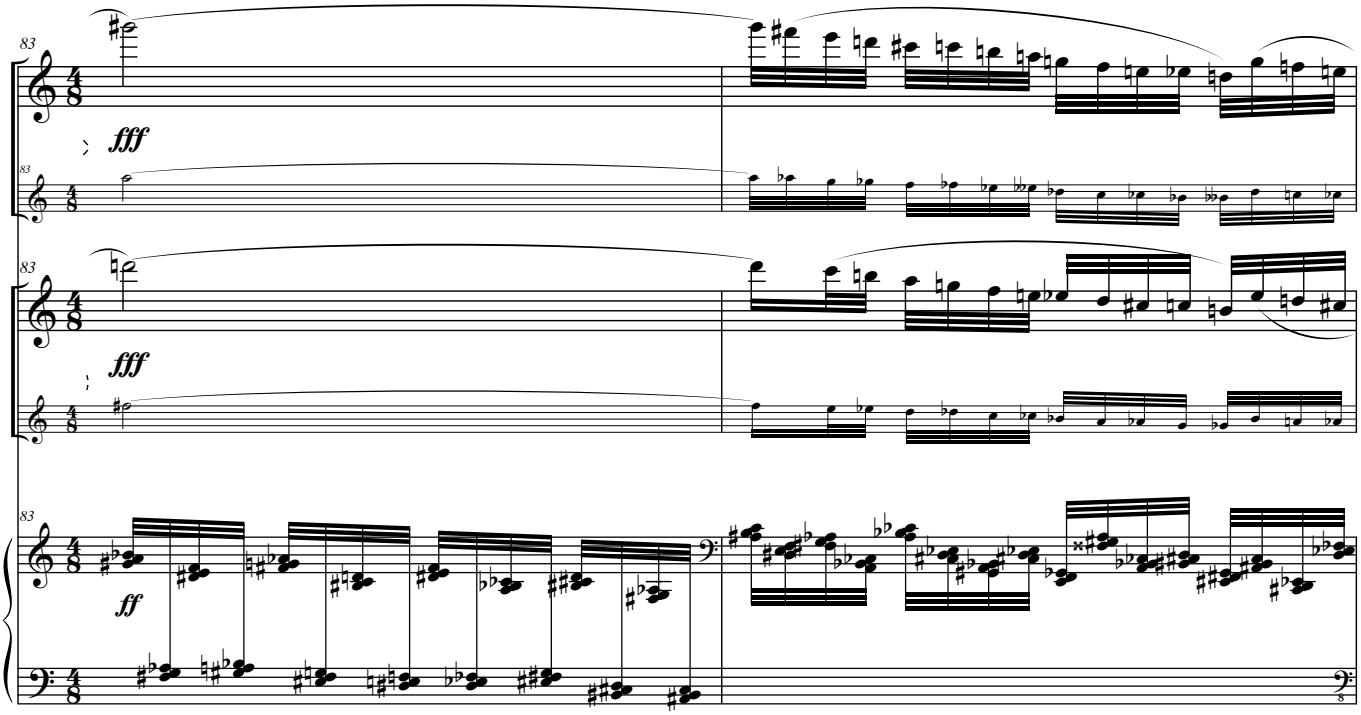
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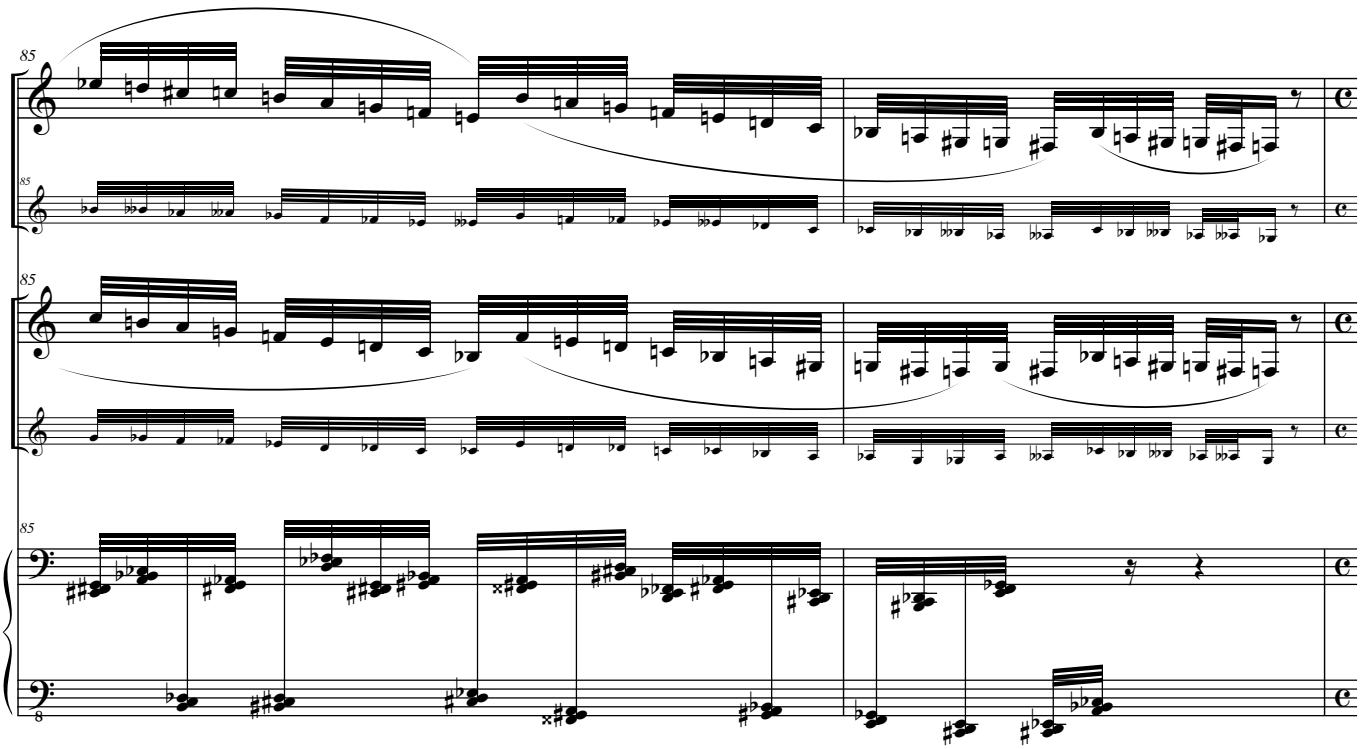
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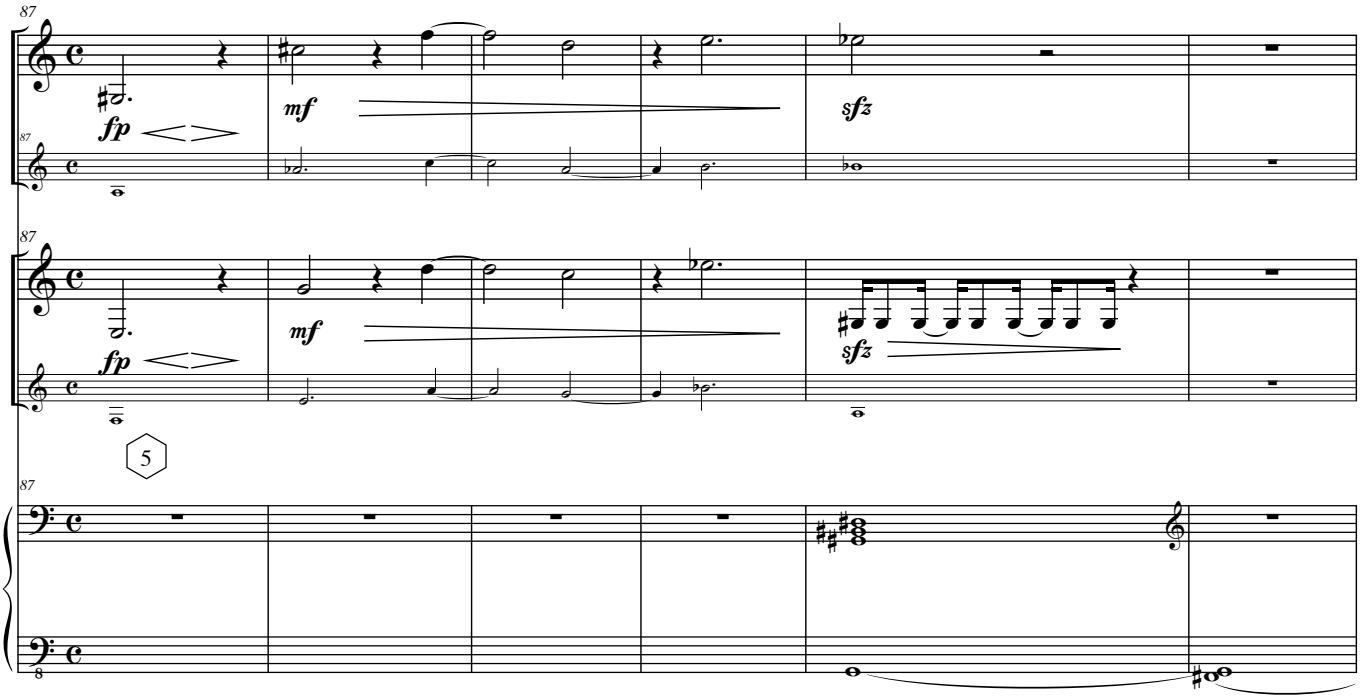
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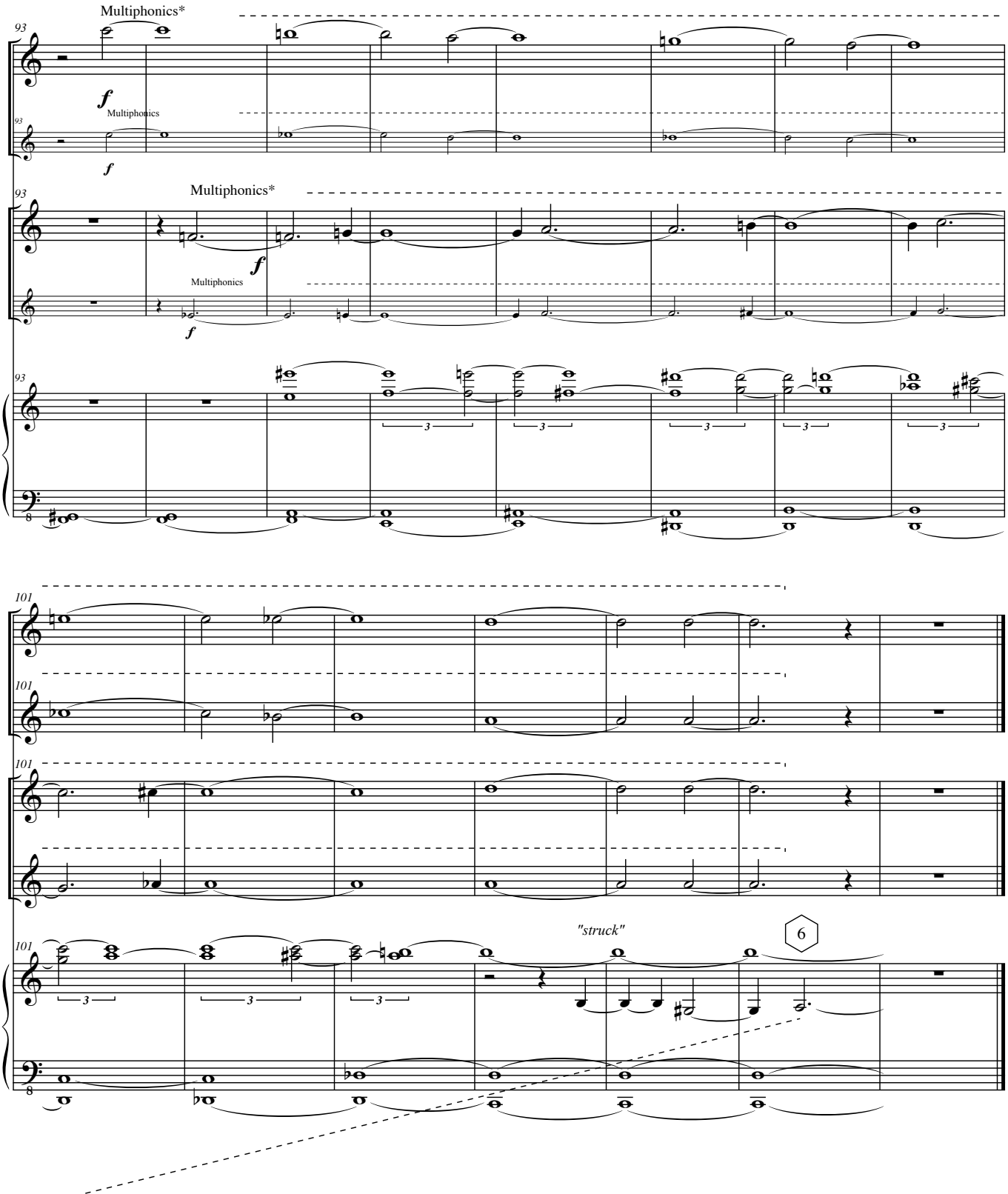

We are led inexorably to a very strange conclusion. The window during which intelligent observers can deduce the true nature of our expanding universe might be very short indeed.
More important, although we are certainly fortunate to live at a time when the observational pillars of the big bang are all detectable, we can easily envisage that other fundamental aspects of the universe are unobservable today. What have we already lost?
Rather than being self-satisfied, we should feel humble. Perhaps someday we will find that our current careful and apparently complete understanding of the universe is seriously wanting.