**Quest 4π**

Dr. Jon Turner

**9 MAIN TRACKS SHAPED IN AN ARCM, + 2 EXTENDED BONUS TRACKS:**

1. **CIRCLE OF THE GREAT SPIRIT I**
   \( \Lambda \times = 72 \text{ BPM} 3/4 \text{ 3:00} \)
   Melodonic theme consists of first 19 digits of pi in base 12. Pi = 3.14159 in base 10, but pi = 3.18480 in base 12. The first nineteen digits, \( 11.1442451180391008 \) become: D# C F E C B A D# F G # F G.
   After an introduction, the pi theme is presented as a broad melody. This setting of the pi theme frames the nine movements (track 1 and track 9).

2. **Quest 4π**
   \( \Lambda \times = 288 \text{ BPM} 4/4 \text{ 2:26} \)
   1400 digits assigned to 12 respective percussion sounds. While 85-digits of the pi sequence are expressed as a chromatic chord progression. The chords move when the zero digit occurs in the eighth note. Phrase endings occur at the harmonic form 03.18480...0...0... etc...0. Whenever the zero digit occurs in the eighth note percussion, with 0=C, chromatic chord progression. The chords move when the zero digit occurs in the eighth note percussion. The harmonic progression follows 48 digits of the arc tangent of pi (\( \pi/4 \)).

3. **Arc Tango I**
   \( \Lambda \times = 129 \text{ BPM} 4/4 \text{ 6:04} \)
   The harmonic progression follows 48 digits of the arc tangent (\( \pi/4 \)), with a repeat, and a coda. Using the opening again. The arc tangent sequence begins with the duodecimal digits, but pi = 3.18480 in base 12. The first 18 digits map to the augmented triad A-F-C#. This is used as the main melody motif. Other familiar melodies and intervals are derived from this opening shape.

4. **Mock Apple π**
   \( \Lambda \times = 100 \text{ BPM} 5/8 \text{ 7:20} \)
   Mock = fake or simulated pi, because 355/113 gives pi correctly to six places. The first 19 digits of the fractional part, \( 2644622388801289071858557376 \), are used to harmonize the main tune, the same first six digits (3.14159) of the pi theme. The fraction 355/113 forms a 12-digit repeating duodecimal series.

5. **π Counter π**
   \( \Lambda \times = 160 \text{ BPM} 11/16 \)
   1000 or so digits from pi are sounded continuously in the bass, with strictly canonic points of imitation by bassoon and flute at major thirds. The rhythm was generated by a hand program which varied the duration of each digit according to the pitch value of its neighboring digit in pi’s duodecimal sequence. Thus, the bass (ever accompanied by bass drum and cymbals) follows the pi sequence exactly and continuously, but the notes form unexpected ever-changing rhythm patterns of two, three, four, or five eighth notes. Phrase endings occur at selected points where all three voices arrive together. These cadences are articulated by a crash cymbal. Then the bass plows ahead, and the other, canonic voices re-enter at 16 beat intervals.

6. **Dintism**
   \( \Lambda \times = 100 \text{ BPM} 5/4 \text{ 1:30} \)
   Pi = a walking bass, 144 digits=36mmx2tag. The bass follows the pi sequence in quarter notes. For every 4 quarters, a piano chord and bebop riff are overlaid (same 4 tones), for a quick 36 bar progression. “Dintism” means a sphere in the lunographic sphere. As straight up as it can get, plausible free-jazz bebop riffs with Monk overtones.

7. **Arc Tango 2**
   \( \Lambda \times = 170 \text{ BPM} 4/4 \text{ 4:33} \)
   The thematic organization is based closely on Arc Tango 1, but here the 160-digit progression is continuous, until the coda begins at m160. This is an altered and expanded version of Arc Tango 1, where its entire repeated melodic structure is applied over the continuous arc tangent sequence for 160 digits before a coda. But the strophic phrase structure always seems to dominate, in spite of the completely unpredictable chord progression from the pi/4 sequence.

8. **Quest 4π 2**
   \( \Lambda \times = 288 \text{ BPM} 4/4 \text{ 2:26} \)
   The first half is exactly the same as in part 1; but after, the central cadence on C, the harmony no longer changes, and this forms a long coda. As the guitar continues to shred the same rhythm over the single C7sus harmony.

9. **Circle of the Great Spirit 2**
   \( \Lambda \times = 72 \text{ BPM} 4/4 \text{ 5:13} \)
   19 digits of pi, like track 1, but with 4/4 variations added: Introduction: Like track 1...
   Main theme: No rhythm
   Variation 1: Half-length durations.
   Variation 2: In 3/4, began the cd as track 1
   Variation 3: Quarter-length durations.
   Theme: Main pi theme returns with rhythm coda: Last phrase eight times.

Total time of the nine movements: 43:40 Extra tracks:

10. **Arc Tango Y**
   \( \Lambda \times = 170 \text{ BPM} 4/4 \text{ 19:37} \)
   Same as 2, but continues way beyond 160, slow-ripping on the aug-triad motive to 768, after which a final thematic recap begins. The auxiliary percussion traces almost 7000 continuous digits of the arc tangent of pi...

11. **Quest 4π Complete**
   \( \Lambda \times = 288 \text{ BPM} 4/4 \text{ 4:44} \)
   Parts 1 and 2 continuous.

Total cd audio time: 68:36

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