

**JAMES TENNEY: WORLD PREMIERES at DNK Amsterdam, OT301.**  
*Spectral Variations Nos. 1 to 3* (2006)

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**Location: OT301 - Overtoom 301, Amsterdam.**

**Date: 19 March 2007 - 21:30.**

**Price: €4**

**Program:**

*For Ann (rising)*. Electronic (1998) James Tenney.  
*Spectral CANON for CONLON Nancarrow (Extended)*. Player Piano (1991) James Tenney.  
*Spectral Variations Nos. 1 to 3*. Player Piano (2006) James Tenney.  
*Accidental for Jim*. Player Piano (2006) Ciarán Maher.

DNK Amsterdam in association with Ciarán Maher and Steim will present the world premieres of three new pieces for player piano by the late James Tenney (1934 - 2006). The pieces will be played on the St. Conlon Disklavier, a midi-controlable grand piano, which will be retuned to produce the pitches of a harmonic series.

James Tenney had a long association with the music of Conlon Nancarrow and played a crucial role in bringing him to the attention of the world. He wrote the very substantial liner notes for the original release of Nancarrow's player piano studies and would go on to transcribe some of that work for orchestra in *Five Studies for Player Piano (Conlon Nancarrow)*, 2000.

In 1972 Tenney began work on *Spectral CANON for CONLON Nancarrow* which is a stunningly intricate process exposition of the rhythmic idea for retuned player piano. The piece was realised in 1974 after Nancarrow himself had punched the roll.

Later, in 1991, Clarence Barlow generated the version now called *Spectral CANON for CONLON Nancarrow (Extended)*, in which the strict process of the canon, which Tenney had cut short on a 24 voice unison in the original, is allowed to work itself through to reveal further the extraordinary richness of this material. Barlow will be present at the current concert and has kindly allowed this piece to be part of the programme.

Tenney wanted to explore the material further and in 1998 sent his friend and student Ciarán Maher the maths for a new variation. Maher generated a rough demo which the pair reviewed together but a refined version was never produced.

In 2006 Tenney visited Ireland for a residency at Trinity College Dublin, and Maher had the chance to resurrect the project. Working with Tenney, he wrote programs in Flash which generated note durations and voice start times in list and graphic form. During this process, two further variations of the form occurred to Tenney, and together they worked out and tested the requisite formulas.

The result is the three new pieces ***Spectral Variations Nos. 1 to 3*** which are premiered in the present concert. These are very literal canons for 24 voices (partials 1 to 24 of a harmonic series on A). Each voice consists of a repeating note which changes duration logarithmically on every repetition. This durational sequence and the voice entry times are designed so that each voice will share a rhythmic ratio with other sounding voices which is directly proportional to their frequency ratios. For instance the 1st and 2nd partials might have a rhythmic ratio of 2:1 or 1:2, and thus create rhythmic octaves as well as a pitch or frequency octaves. The same relationships will hold for any two sounding voices. This is often called a rhythmic relationship after Henry Cowell's instrument.

In addition we will present *Accidental for Jim*, a further manipulation of the material by Maher in which the rhythmic relationships for the pitch set are inverted ( i.e. harmonic ratios 24:23 have the rhythmic relationships 1:2 etc. ).

The concert will open a subtle refinement of Tenney's 1969 electroacoustic classic *For Ann (rising)*. The piece generates an auditory illusion sometimes known as a Shepard tone in which sweeping sinetones appear to rise infinitely. The present refinement, *For Ann (rising)*, approximates a golden section measurement of the minor 6th which separates the glissandi and is described by Larry Polansky in *Soundings 13* as follows:

*"I have heard Tenney consider a possible modification of this piece which would, I think, be an interesting exploration. He suggests that each glissando be related by the ratio of successive Fibonacci terms [...] or about 1.618033988749894 (etc.), a minor sixth. This interval [...] would result in the property of all first order difference tones of any given glissando pair being present in some lower glissando. [...] and the piece might*

*be conceivably be smoother, or more "perfect".*"

Maheer made his 'phi' version at Dartington in 1998 where Tenney heard it for the first time.

Unfortunately James Tenney died in August 2006 before he could hear the new player piano pieces and this concert is dedicated to his memory and his contagious enthusiasm.

cm belfast, jan 2007

DNK:	<a href="http://www.dnk-amsterdam.com">www.dnk-amsterdam.com</a>
Ciarán Maheer:	<a href="http://www.rhizomecowboy.com">www.rhizomecowboy.com</a>
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