

# **47 TUCANAE**

violist(s), 17 music stands and a large, open space

Robert Blatt

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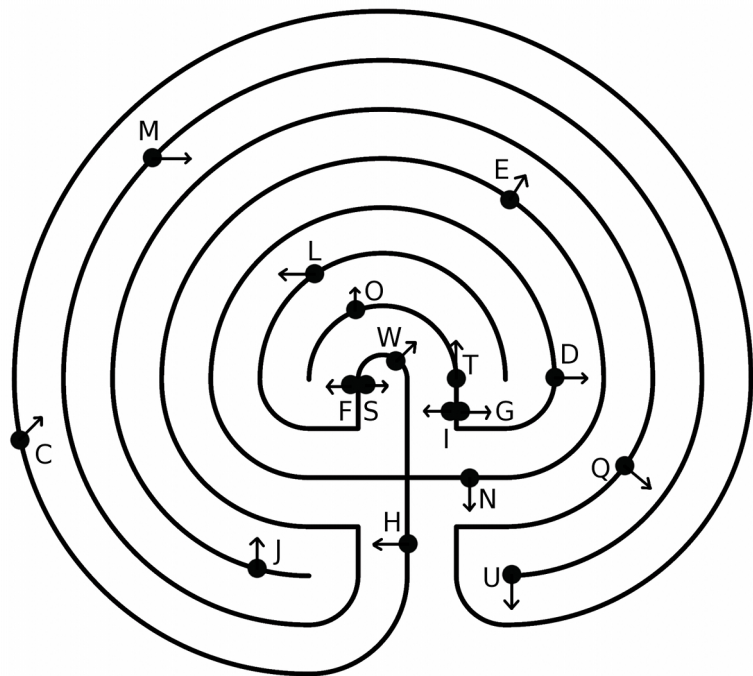
violist(s), 17 music stands and a large, open space

The work involves the superimposition of 17 known positions of millisecond pulsars in the globular cluster 47 Tucanae on a seven-circuit labyrinth. A diagram outlines the position of each pulsar within the labyrinth. A music stand is placed at each pulsar position, with the front of the music stands facing the directions indicated by arrows in the diagram.

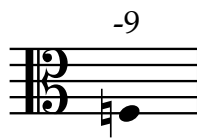
There are 17 pages of music, and each page contains the name and frequency of rotation of one of the 17 pulsars notated in equal temperament with cent deviation. Each music stand holds the page of music associated with its pulsar.

A performance begins with a violist entering the labyrinth. With more than one violist, each enters one at a time, waiting until the preceding violist has reached at least one music stand. Upon reaching a music stand, the indicated note is softly played for the length of a bow stroke. When a violist arrives at the center, they turn around and follow the path back. The performance is finished when all violists have exited.

A performance occurs, ideally, outside at night under a starry sky.




J0023-7204C



J0024-7204D

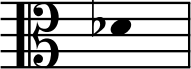
+15



The image shows a musical staff with a bass clef. On the second line from the bottom, there is a sharp sign (#) followed by a solid black dot. The text '+15' is positioned above the staff, and 'J0024-7204D' is to the left of the staff.

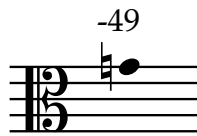
J0024-7205E

+35



The image shows a musical score for a single measure. The measure is identified by the text 'J0024-7205E' on the left and '+35' above the staff. The staff is a five-line bass clef staff. A single note is written on the second line from the bottom, which is marked with a flat symbol (b). The note is a half note.

J0024-7204F



J0024-7204G

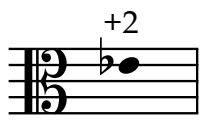
+4



The image shows a musical staff with a bass clef. A single note is placed on the second line from the bottom. Above the staff, the text '+4' is written. To the left of the staff, the alphanumeric string 'J0024-7204G' is written.



J0024-7204H



A musical staff with a treble clef and a key signature of one flat (B-flat). The staff contains a single note on the second line, which is a B-flat. Above the note is a sharp sign with the number '2', indicating a sharp sign with a +2 alteration.

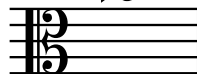
J0024-7204I

-40



A musical staff with a bass clef (F-clef) on the left. A single note is positioned on the second line from the bottom, which is the note G2. The note has a stem pointing downwards and a solid black oval head.

J0023-7203J




+36



J0024-7204L

-22



J0023-7205M



-33

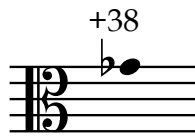
J0024-7204N



-12

The image shows a musical staff with a bass clef. A sharp sign (#) is placed on the first line of the staff, indicating the note F-sharp. A dot is placed on the first line, representing the note. Above the staff, the number '-12' is written, likely indicating a fret number for a guitar. To the left of the staff, the alphanumeric string 'J0024-7204N' is printed.

J0024-7204O



J0024-7204Q



+7

The image shows a musical notation for a +7 chord. It consists of a five-line staff with a bass clef (F-clef) on the left. A sharp sign (#) is placed on the first line of the staff, indicating the note F-sharp. A solid black dot (the chord symbol) is placed on the second line of the staff, indicating the note G. Above the staff, the text "+7" is written, indicating a dominant seventh chord. To the left of the staff, the alphanumeric string "J0024-7204Q" is printed.



J0024-7204S



+20

J0024-7204T

+13



A musical staff with a bass clef. A single note is written on the staff, positioned below the bottom line. The note has a stem pointing downwards and a solid black oval head.

J0024-7203U



-21

J0024-7204W

+40

