



The orbit of the comet of 1680, fit to a parabola, as shown in Isaac Newton's *Principia*.

C/1680 is also called the Great Comet of 1680, Kirch's Comet, and Newton's Comet, has the distinction of being the first comet discovered by telescope.

Demo

- Metadata as a terminology dependency
- STAMP versioning underneath
- DAG representation of logical expressions

Import of ISAAC Metadata & SNOMED

Duplicate:

SememeChronology:Logic Graph assemblage:EL++ stated form assemblage (ISAAC) referenced component:CONCEPT: preferred (ISAAC)

Duplicate detected

```
Duplicates:
Root[0]→[3]
Necessary[3]→[2]
And[2]→[1]
Concept[1] Acceptability (foundation metadata concept)

Root[0]→[3]
```

Concept[1] description acceptability (ISAAC)

Necessary[3] \rightarrow [2]

And[2] \rightarrow [1]

Now what?

```
Reference expression:

Root[0r]→[3r]

Necessary[3r]→[2r]

And[2r]→[1r]

Concept[1r] Acceptability (foundation metadata concept)
```

```
Comparison expression:

Root[0c]→[3c]

Necessary[3c]→[2c]

And[2c]→[1c]

Concept[1c] description acceptability (ISAAC)
```

Isomorphic Analysis

```
Root[2i]→[1i]
Necessary[1i]→[0i]
And[0i]
```

Isomorphic solution:

```
[0r] \rightarrow [0c] \text{ Root}[0r] \rightarrow [3r]

[1r] \rightarrow \varnothing

[2r] \rightarrow [2c] \text{ And}[2r] \rightarrow [1r]

[3r] \rightarrow [3c] \text{ Necessary}[3r] \rightarrow [2r]
```

```
Reference expression:
Root[0r]→[3r]
Necessary[3r]→[2r]
And[2r]→[1r]
Concept[1r] Acceptability
```

```
Comparison expression:

Root[0c]→[3c]

Necessary[3c]→[2c]

And[2c]→[1c]

Concept[1c] description

acceptability
```

Contradiction Management

```
Additions:
  Concept[1r] Acceptability (foundation metadata concept)
Deletions:
  Concept[1c] description acceptability (ISAAC)
Shared relationship roots:
New relationship roots:
  Concept[1] Acceptability (foundation metadata concept)
Deleted relationship roots:
  Concept[1] description acceptability (ISAAC)
Merged expression:
  Root [3m] \rightarrow [2m]
    Necessary [2m] → [1m]
        And [1m] \rightarrow [4m, 0m]
             Concept[4m] description acceptability (ISAAC)
             Concept[0m] Acceptability (foundation metadata concept)
```

Discussion Points

- STAMP versioning over graph objects
- Language/dialect represented by metadata concepts
 - HL7 FHIR terminology services harmonization
 - Enable multiple dialects
 - Patient friendly
 - Medcin, IMO, et al.
 - Specialty specific (fundus...)
 - Extensible in a standard way
- Standardize metadata terminology?