Lambert Algorithm

Given: r_1, r_2, space triangle (geometric info), TOF
Find: transfer arc

1. Distinguish angular separation between r_1 and r_2
Identify transfer angle as $< 180^\circ$ or $> 180^\circ$

2. Calculate TOF_{par}; compare $TOF_{desired}$ with TOF_{par}

$TOF < TOF_{par}$ 
$TOF > TOF_{par}$ 

3. Guess 'a':

$a = a_{min}$ smallest a for elliptical arcs
$a = 0$ smallest a for hyperbolic arcs

4. Calculate α_o, β_o or α'_o, β'_o

[4a. Decide on transfer type if not already known: A or B]

5. Iterate on 'a'

6.