## Junior Johnson vs. The Dwarves

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## Outline

- This is the first structural section
- Section 2
- Section 3
- 4 A Story
- 6 A Story
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## Frame 1

## Thanks to Eric Fraga

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Thanks to everyone else

for contributing to the discussion

# Frame 2 (where we will not use columns)

## Request

Please test this stuff!

## Frame 2.1

#### here is some stuff

- here is a list
- more in the list
- even more
  - nested
  - 2 numbered (that didn't work!)

# Frame 3.1

# Tuesday Night, Slam-Coding

basics from a paper, into a library five layers down

$$B = \begin{cases} \frac{1}{2} - \frac{\theta^2}{4!} + \frac{\theta^4}{6!}, & |\theta| \lesssim 10^{-7} \\ (1 - \cos \theta)/\theta^2 & \text{otherwise} \end{cases}$$
if (std::abs(th) < SMALL\_ANGLE) {
$$B = (0.5 - \text{th} * \text{th} * 1.0 / 24.0 \\ + \text{th} * \text{th} * \text{th} * \text{th} * 1.0 / 720.0);$$
} else { B = (1.0 - cos(th)) / th \* th; }

# Wednesday -> Friday, Three Thousand More Lines

# Friday Night, Integration Time, Something is Wrong

Can you finish by Monday?



"the manuscript-submission instructions for the Physical Review journals

state that multiplication is of higher precedence than division with a slash,

and this is also the convention observed in prominent physics textbooks such

as the Course of Theoretical Physics by Landau and Lifshitz and the

Feynman Lectures on Physics."

# But C / C++ / Python / MATLAB / etc. say

$$x/yz = xz/y$$



# Unit Testing would have caught this Tuesday

# Putting off testing to Friday requires us to debug / search

Actually, this bug was also lurking in MATLAB code transcribed from the same source