

UNIVERSITY NAME

DOCTORAL THESIS

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# Mathematical expressions

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Doctor WHO

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Bruce DICKINSON

*"Help, I'm being oppressed. Come and see the violence inherent in the system. "*

Dennis

*"I don't think you trust in, my, self righteous suicide I, cry, when angels deserve to die "*

Serj Tankian

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# List of Abbreviations

**LAH** List Abbreviations **Here**  
**WSF** What (it) Stands For





# Physical Constants

Speed of Light  $c_0 = 2.997\,924\,58 \times 10^8 \text{ m s}^{-1}$  (exact)



# List of Symbols

$a$	distance	m
$P$	power	W (J s <sup>-1</sup> )
$\omega$	angular frequency	rad



## Chapter 1

# numerical

### 1.1 Governing equations

Continuity equation:

$$\frac{\partial \rho}{\partial t} + \nabla(\rho U) = 0 \quad (1.1)$$

Momentum equation:

$$\frac{dU}{dt} = -\frac{1}{\rho} \nabla p + \nu \nabla^2 U \quad (1.2)$$

#### 1.1.1 Derivation of ...

continuity

#### 1.1.2 Derivation of ...

momentum

### 1.2 RANS

RANS

#### 1.2.1 Derivation of RANS

rans

### 1.3 LES

#### 1.3.1 Folders

#### 1.3.2 Files

### 1.4 Pictures

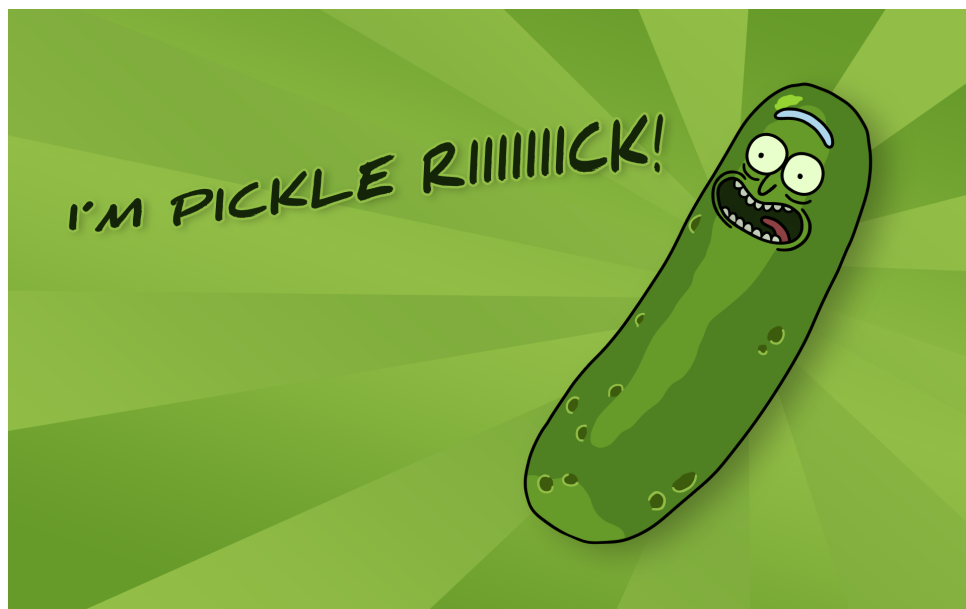


FIGURE 1.1: Pickle Rick.