## An Event-B Specification of

## ${\bf Simple Theory Test}$

This model tests a machine that uses a theory that in turn uses another theory.

1	MACHINE LePond  1.1 fish fush
<b>2</b>	THEORY Crabs
	2.1 Crustean
	2.2 Crustean
3	THEORY Fishes
	3.1 Salmon
	3.2 Salmon

## 1 MACHINE LePond 1.1 VARIABLES fishfushINVARIANTS inv1: $fish \in \frac{\mathrm{Salmon}(\mathbb{Z})}{\mathbb{Z}}$ Invariant 1 comment $fush \in Salmon(Crustean(BOOL))$ Invariant 2 comment inv2: EVENT INITIALISATION THEN fish := LeBigFishConstructor makes $\operatorname{Salmon}(\mathbb{Z})$ act1:

Constructor make Salmon(Crustean(BOOL))

fush := LeBigFish

END

THEORY Crabs	2
DATATYPES	2.1
nilfish conshel	2.2
OPERATORS	
compo	

END

THEORY Fishes	3
ATATYPES	3.1
	3.2
LeBigFish	
END	

Crabs, 3

fish, 2

Fishes, 4

fush, 2

INITIALISATION, 2

LePond, 2