1 Namespace: "http://www.pharmml.org/2013/03/Maths"

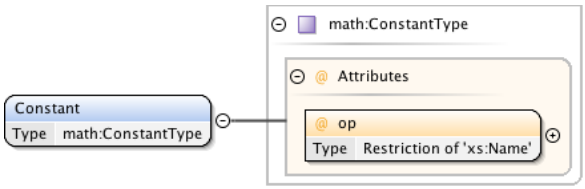
1.1 Schema(s)

1.1.1 Main schema `maths.xsd`

Namespace	http://www.pharmml.org/2013/03/Maths

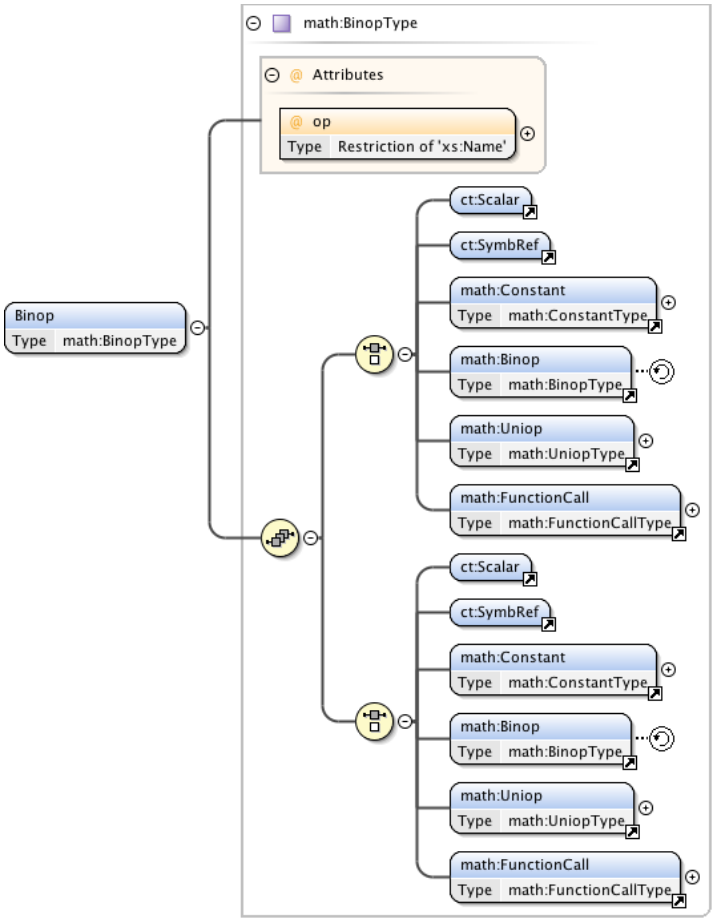
1.2 Element(s)

1.2.1 Element `math:Constant`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A constant symbol.
Diagram	
Type	math:ConstantType
Attributes	**QName** / **Type** / **Use** **op** / restriction of xs:Name / required The type of constant.

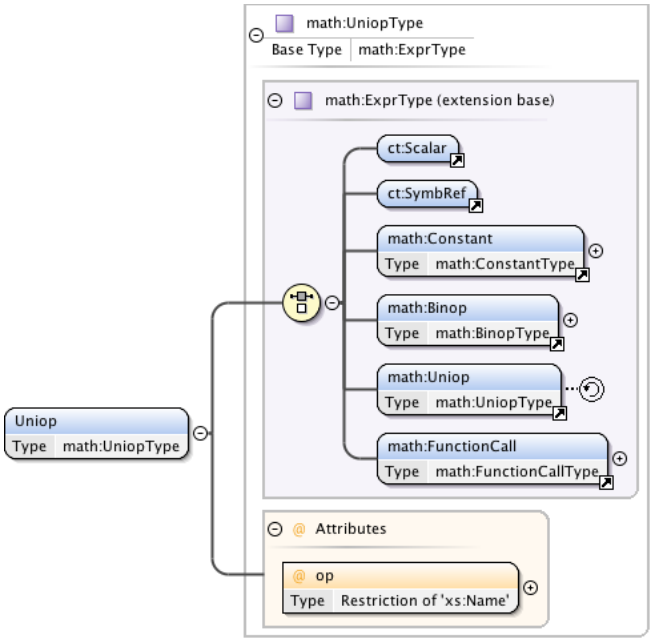
1.2.2 Element `math:Binop`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A binary operator.

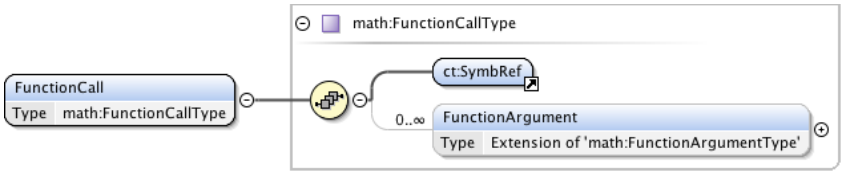
<table>
<tr><td>Diagram</td><td> 
</td></tr>
<tr><td>Type</td><td>math:BinopType</td></tr>
<tr><td>Attributes</td><td>
<table>
<tr><th>QName</th><th>Type</th><th>Use</th><th></th><th></th><th></th></tr>
<tr><td>op</td><td>restriction of xs:Name</td><td>required</td><td></td><td></td><td></td></tr>
<tr><td></td><td colspan="5">The binary operator type. See the specification for a more detailed description.</td></tr>
</table>
</td></tr>
</table>

1.2.3 Element `math:Uniop`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A unary operator.

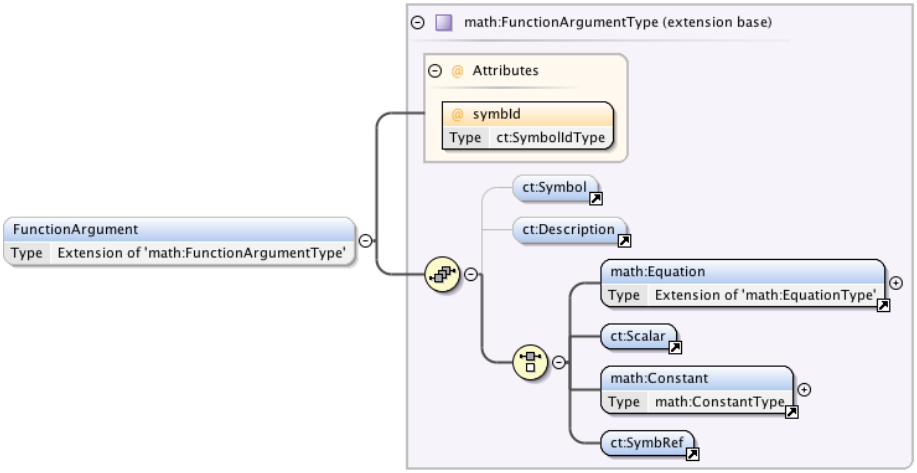
Diagram	
Type	math:UniopType
Attributes	**QName** / **Type** / **Use**: **op** — restriction of xs:Name — required The operator. More detail in the specification.

1.2.4 Element `math:FunctionCall`

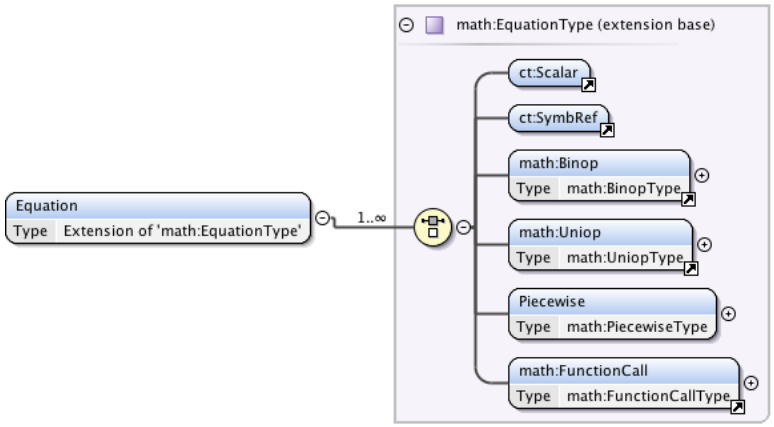
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A function call.
Diagram	
Type	math:FunctionCallType

1.2.5 Element `math:FunctionCallType /math:FunctionArgument`

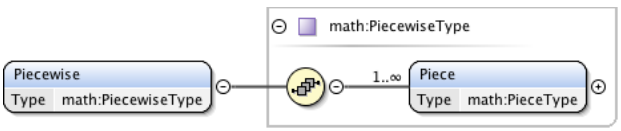
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	An argument of the function.

Diagram	
Type	extension of math:FunctionArgumentType
Attributes	**QName** / **symbId** — **Type**: SymbolIdType — **Use**: required — The symbold ID of the argument.

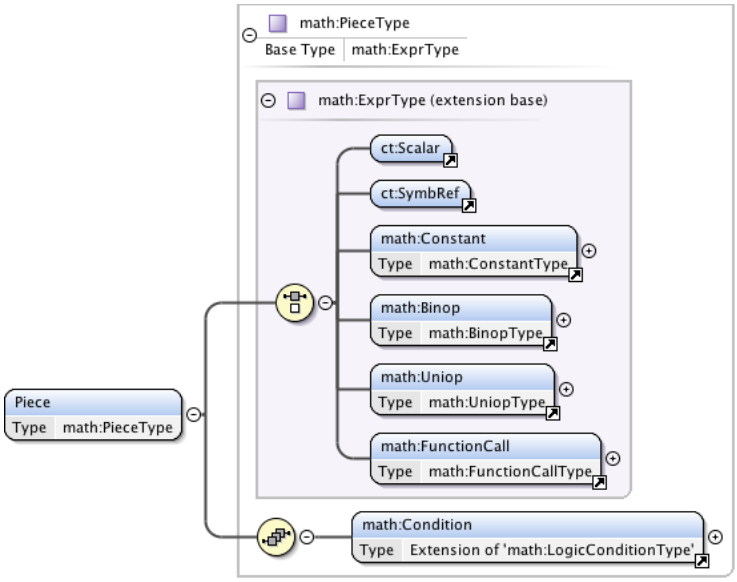
1.2.6 Element `math:Equation`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A mathematical expression that is evaluated to a scalar type.
Diagram	
Type	extension of math:EquationType

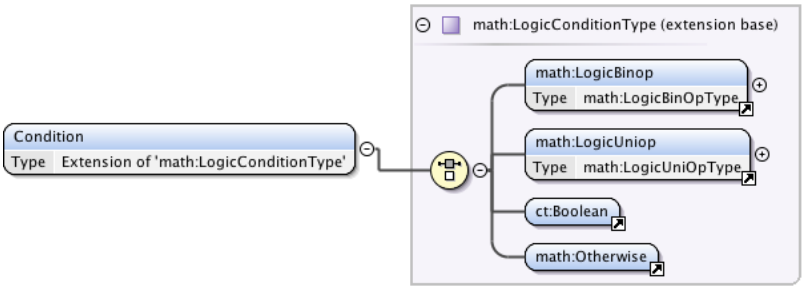
1.2.7 Element `math:EquationType /math:Piecewise`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	Defines a piecewise expression.
Diagram	
Type	math:PiecewiseType

1.2.8 Element `math:PiecewiseType /math:Piece`

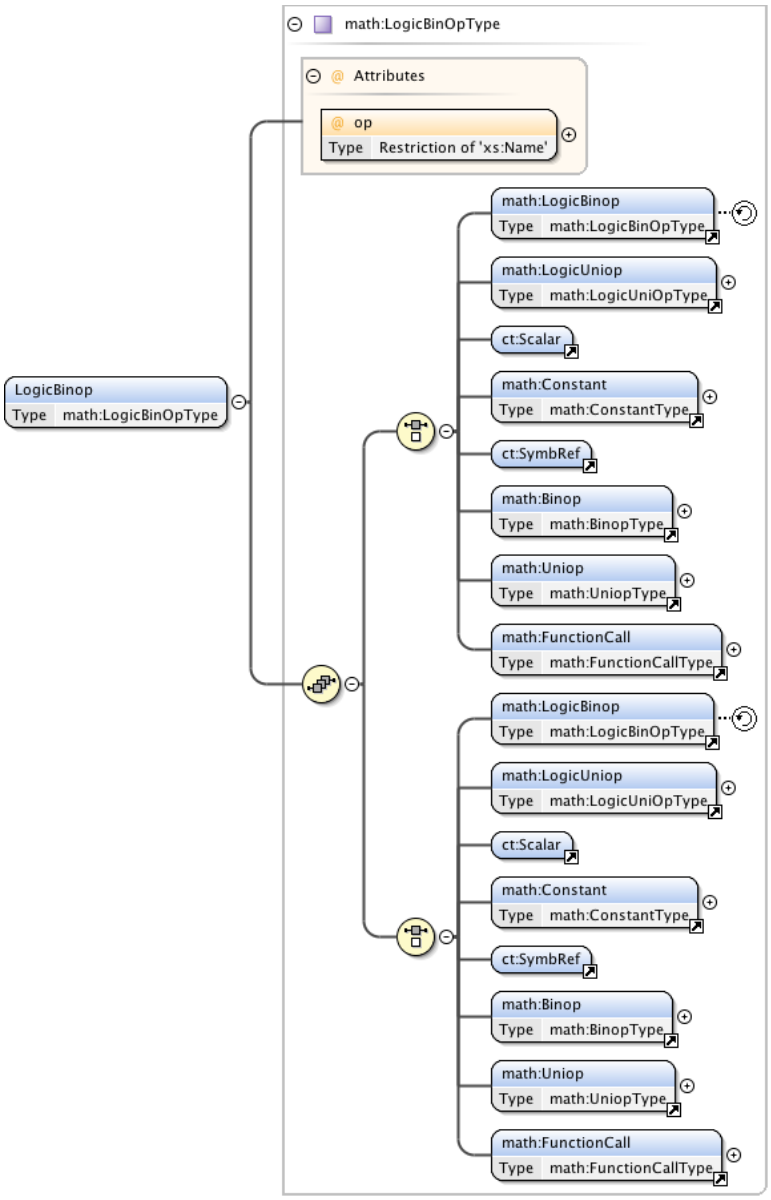
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	Defines a piece in the piecewise function.
Diagram	
Type	math:PieceType

1.2.9 Element `math:Condition`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A condition defined by a logical expression. Can be evaluated to True or False.
Diagram	
Type	extension of math:LogicConditionType

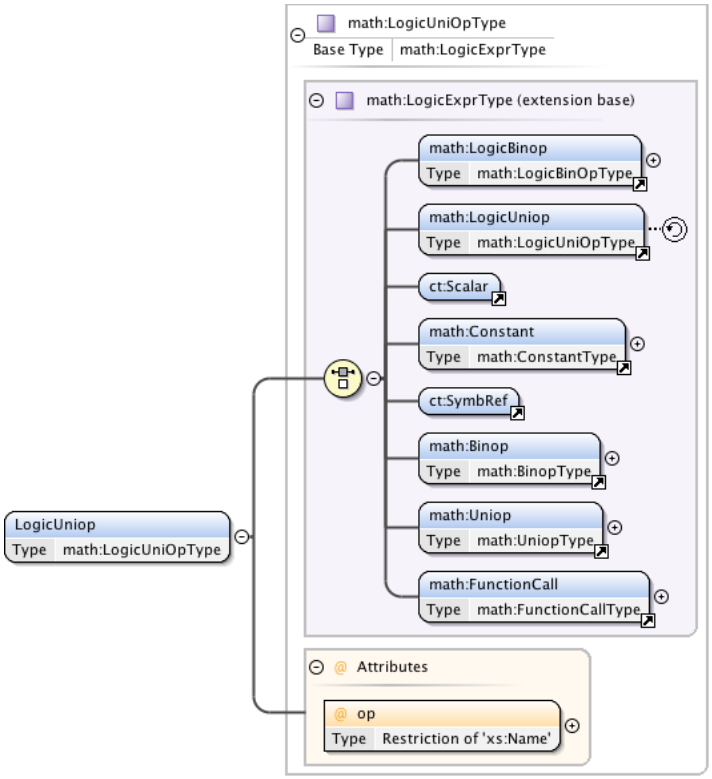
1.2.10 Element `math:LogicBinop`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A logical binary operator used in logical expressions.

Diagram	
Type	math:LogicBinOpType
Attributes	**QName** / **Type** / **Use** **op** / restriction of xs:Name / required The logical binary operator type.

1.2.11 Element `math:LogicUniop`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A logical unary operator used in logical expressions.

Diagram	
Type	math:LogicUniOpType
Attributes	**QName** / **Type** / **Use**: **op** — restriction of xs:Name — required The unary operator type.

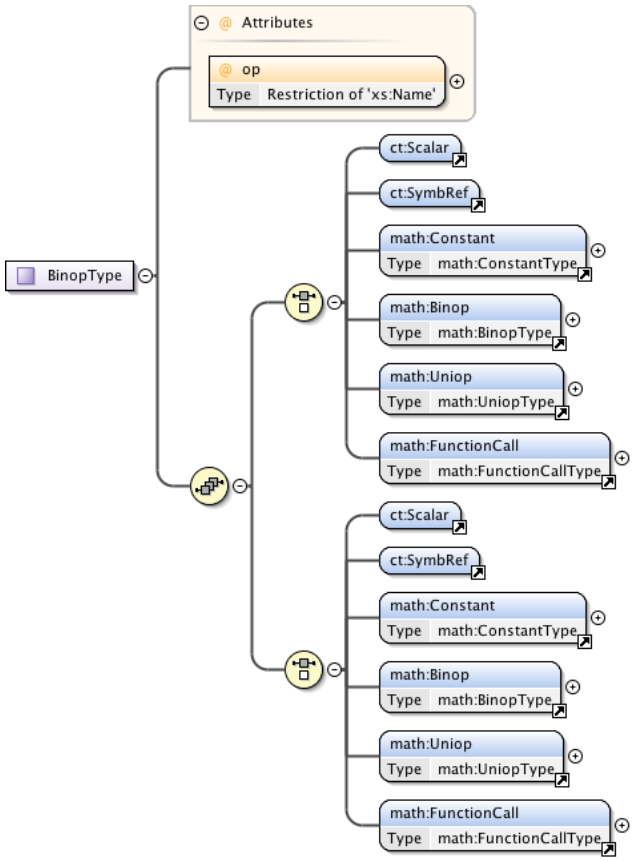
1.2.12 Element `math:Otherwise`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The otherwise case in a piecewise function.
Diagram	

1.3 Complex Type(s)

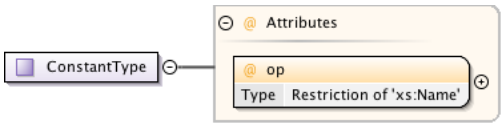
1.3.1 Complex Type `math:BinopType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A binary operator describing a numerical operation. Takes two operands (as you would expect).

Diagram	

Attributes	QName	Type	Use			
	op	restriction of xs:Name	required			
		The binary operator type. See the specification for a more detailed description.				

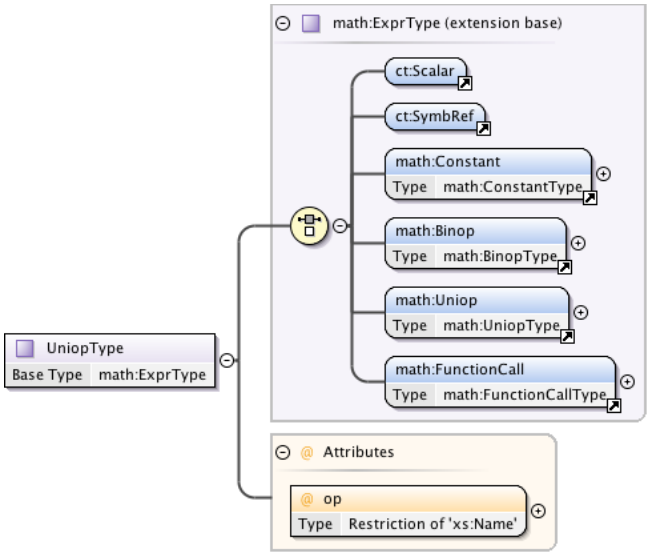
1.3.2 Complex Type `math:ConstantType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining a mathematical constant.
Diagram	

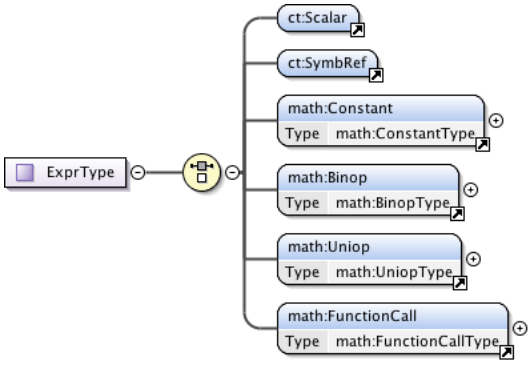
Attributes	QName	Type	Use			
	op	restriction of xs:Name	required			
		The type of constant.				

1.3.3 Complex Type `math:UniopType`

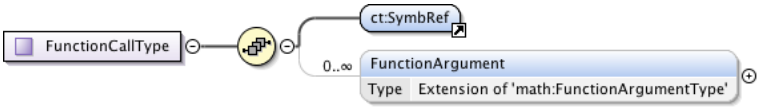
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The unary operator type. Takes one operator.

Diagram	
Type	extension of math:ExprType
Attributes	**QName** / **op**: **Type** restriction of xs:Name; **Use** required; The operator. More detail in the specification.

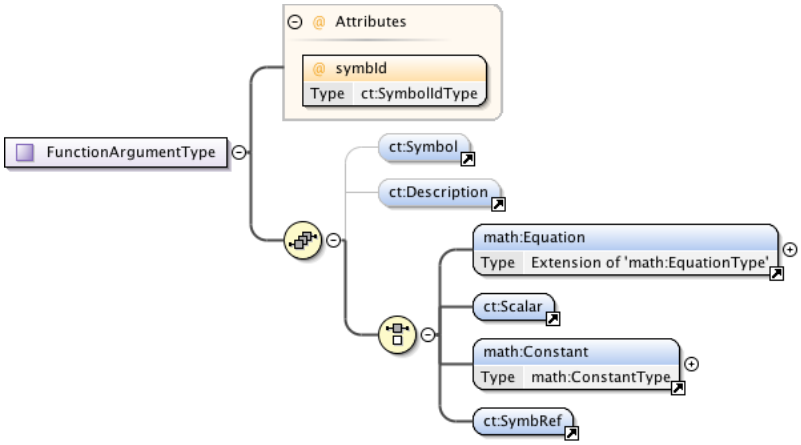
1.3.4 Complex Type `math:ExprType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining a mathematical expression.
Diagram	

1.3.5 Complex Type `math:FunctionCallType`

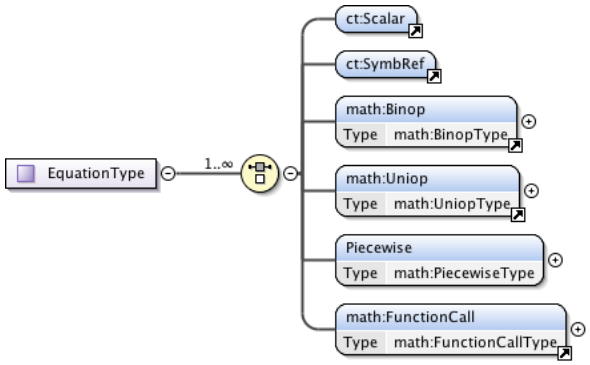
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A type defining a function call.
Diagram	

1.3.6 Complex Type `math:FunctionArgumentType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A type defining an argument of a function being called.
Diagram	

Attributes	QName	Type	Use			
	symbId	SymbolIdType	required			
		The symbold ID of the argument.				

1.3.7 Complex Type `math:EquationType`

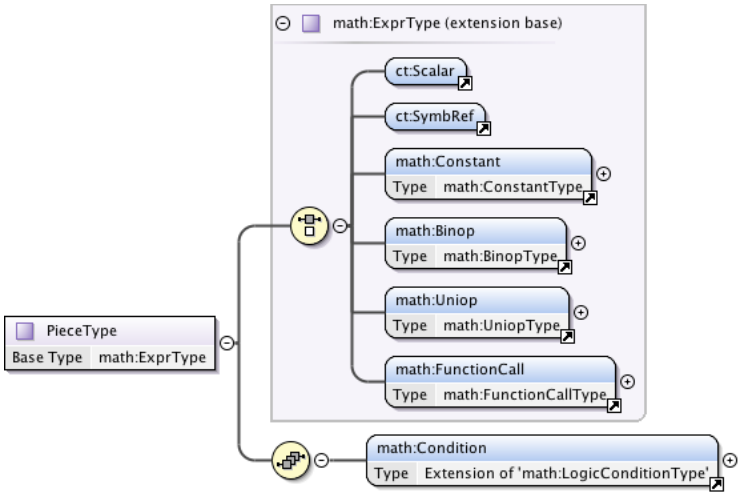
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	Complex Type that defines a mathematical equation.
Diagram	

1.3.8 Complex Type `math:PiecewiseType`

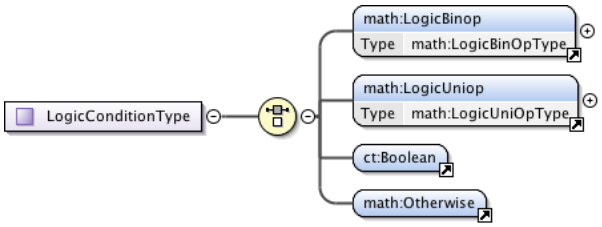
Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining a piecewise function.
Diagram	

1.3.9 Complex Type `math:PieceType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining a `piece' in a piecewise function.

Diagram	
Type	extension of math:ExprType

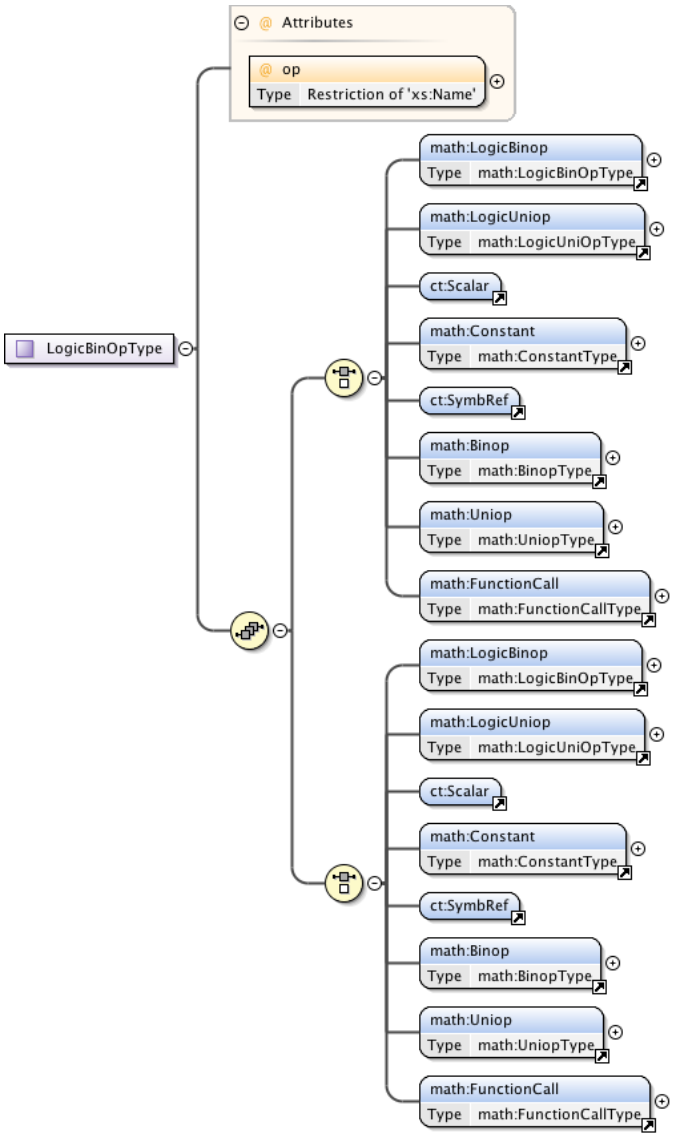
1.3.10 Complex Type `math:LogicConditionType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining logical condition.
Diagram	

1.3.11 Complex Type `math:LogicBinOpType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	The schema type defining a binary logical operator.

Diagram

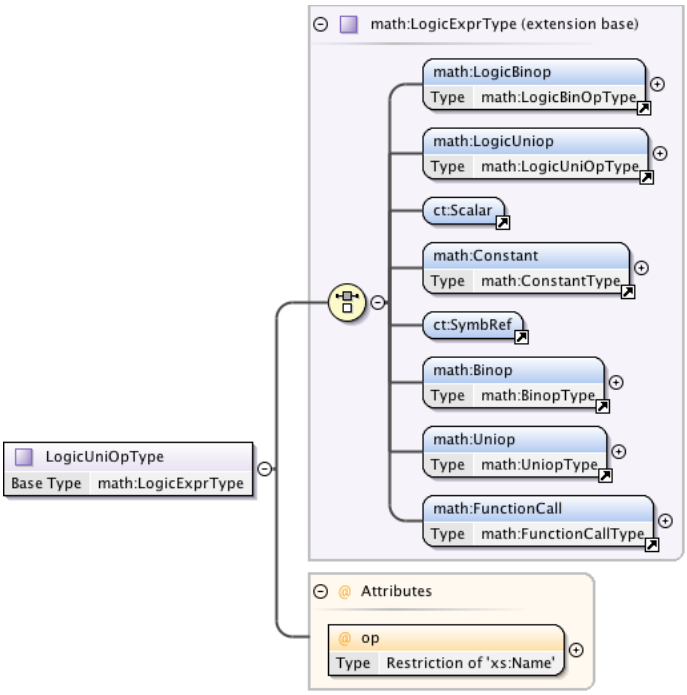


Attributes

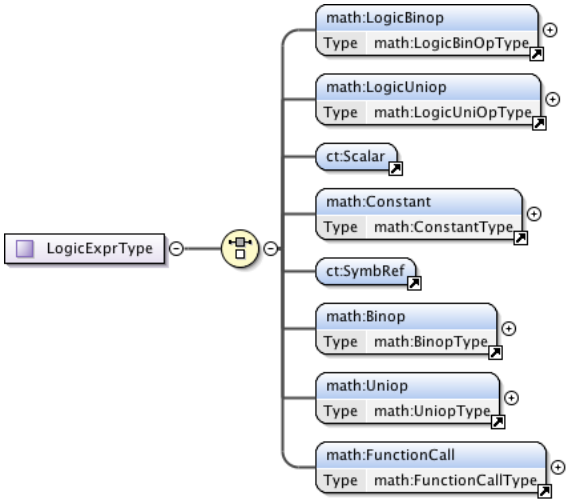
QName	Type	Use			
op	restriction of xs:Name	required			
	The logical binary operator type.				

1.3.12 Complex Type `math:LogicUniOpType`

Namespace	http://www.pharmml.org/2013/03/Maths

Diagram	
Type	extension of math:LogicExprType
Attributes	**QName** / **Type** / **Use** **op** / restriction of xs:Name / required The unary operator type.

1.3.13 Complex Type `math:LogicExprType`

Namespace	http://www.pharmml.org/2013/03/Maths
Annotations	A logical expression.
Diagram	

2 Namespace: ""

2.1 Attribute(s)

2.1.1 Attribute `math:ConstantType /@op`

Namespace	No namespace
Annotations	The type of constant.
Type	restriction of xs:Name
Facets	enumeration `notanumber` enumeration `pi` enumeration `exponentiale` enumeration `infinity`

2.1.2 Attribute `math:LogicUniOpType /@op`

Namespace	No namespace
Annotations	The unary operator type.
Type	restriction of xs:Name
Facets	enumeration `isDefined` enumeration `not`

2.1.3 Attribute `math:LogicBinOpType /@op`

Namespace	No namespace
Annotations	The logical binary operator type.
Type	restriction of xs:Name
Facets	enumeration `lt` enumeration `leq` enumeration `gt` enumeration `geq` enumeration `eq` enumeration `neq` enumeration `and` enumeration `or` enumeration `xor`

2.1.4 Attribute `math:FunctionArgumentType /@symbId`

Namespace	No namespace
Annotations	The symbold ID of the argument.
Type	SymbolIdType

2.1.5 Attribute `math:UniopType /@op`

Namespace	No namespace
Annotations	The operator. More detail in the specification.
Type	restriction of xs:Name

Facets	enumeration	exp
	enumeration	log
	enumeration	minus
	enumeration	factorial
	enumeration	sin
	enumeration	cos
	enumeration	tan
	enumeration	sec
	enumeration	csc
	enumeration	cot
	enumeration	sinh
	enumeration	cosh
	enumeration	tanh
	enumeration	sech
	enumeration	csch
	enumeration	coth
	enumeration	arcsin
	enumeration	arccos
	enumeration	arctan
	enumeration	arcsec
	enumeration	arccsc
	enumeration	arccot
	enumeration	arcsinh
	enumeration	arccosh
	enumeration	arctanh
	enumeration	arcsech
	enumeration	arccsch
	enumeration	arccoth
	enumeration	floor
	enumeration	abs
	enumeration	ceiling
	enumeration	logistic
	enumeration	logit
	enumeration	probit

2.1.6 Attribute `math:BinopType /@op`

Namespace	No namespace
Annotations	The binary operator type. See the specification for a more detailed description.
Type	restriction of xs:Name
Facets	enumeration plus
	enumeration minus
	enumeration times
	enumeration divide
	enumeration power
	enumeration logx
	enumeration root