

finite-partial-functions^{0,22}

ABS: $a:A \text{ fp} \rightarrow B(a)$ **fpf**

STM: fpf_wf

STM: subtype-fpf

STM: subtype-fpf2

STM: subtype-fpf3

ABS: $x \in \text{dom}(f)$ **fpf-dom**

STM: fpf-dom_wf

ABS: $\text{fpf-domain}(f)$ **fpf-domain**

STM: fpf-domain_wf

STM: member-fpf-domain

STM: fpf-trivial-subtype-set

STM: fpf-trivial-subtype-top

STM: fpf-dom_functionality

STM: fpf-dom_functionality2

STM: fpf-dom-type

STM: fpf-dom-type2

ABS: **fpf-empty**

STM: fpf-empty_wf

ABS: $\text{fpf-is-empty}(f)$ **fpf-is-empty**

STM: fpf-is-empty_wf

STM: assert-fpf-is-empty

ABS: $f(x)$ **fpf-ap**

STM: fpf-ap_wf

STM: fpf-ap_functionality

ABS: $f(x)?z$ **fpf-cap**

STM: fpf-cap-wf-univ
 STM: fpf-cap_wf
 ABS: $z \text{ !} = f(x) \Rightarrow P(a;z)$ **fpf-val**
 STM: fpf-val_wf
 ABS: $f \subseteq g$ **fpf-sub**
 STM: fpf-sub_wf
 STM: sq_stable__fpf-sub
 STM: fpf-empty-sub
 STM: fpf-sub-functionality
 STM: fpf-sub-functionality2
 STM: fpf-sub_functionality
 STM: fpf-sub_functionality2
 STM: fpf-sub_transitivity
 STM: fpf-sub_weakening
 STM: subtype-fpf-cap
 STM: subtype-fpf-cap-top
 STM: fpf-cap-void-subtype
 STM: subtype-fpf-cap-void
 STM: fpf-cap_functionality
 STM: fpf-cap-subtype_functionality
 STM: fpf-cap_functionality_wrt_sub
 STM: fpf-cap-subtype_functionality_wrt_sub
 STM: fpf-cap-subtype_functionality_wrt_sub2
 ABS: $f \parallel g$ **fpf-compatible**
 STM: fpf-compatible_wf
 STM: fpf-compatible-wf2
 STM: fpf-sub-compatible-left

STM: fpf-sub-compatible-right
STM: subtype-fpf-cap5
STM: subtype-fpf-cap-void2
STM: subtype-fpf-cap-void-list
STM: fpf-cap-compatible
ABS: $f \oplus g$ **fpf-join**
STM: fpf-join_wf
STM: fpf-join-wf
STM: fpf-join-empty
STM: fpf-empty-join
STM: fpf-join-empty-sq
STM: fpf-join-idempotent
STM: fpf-join-assoc
STM: fpf-join-dom
STM: fpf-join-dom2
STM: fpf-join-dom-sq
STM: fpf-domain-join
STM: fpf-join-is-empty
STM: fpf-join-ap
STM: fpf-join-ap-left
STM: fpf-join-ap-sq
STM: fpf-join-cap-sq
STM: fpf-join-cap
STM: fpf-join-range
STM: fpf-sub-join-left
STM: fpf-sub-join-left2
STM: fpf-sub-join-right

STM: fpf-sub-join-right2
 STM: fpf-sub-join
 STM: fpf-join-sub
 STM: fpf-join-sub2
 STM: fpf-sub-join-symmetry
 STM: fpf-sub-val
 STM: fpf-sub-val2
 STM: fpf-sub-val3
 ABS: $L \vdash \text{fpf} \rightarrow v$ **fpf-const**
 STM: fpf-const_wf
 STM: fpf-const-dom
 ABS: $x : v$ **fpf-single**
 STM: fpf-single_wf
 STM: fpf-single_wf2
 STM: fpf-single-sub-reflexive
 STM: fpf-cap-single1
 STM: fpf-cap-single-join
 STM: fpf-ap-single
 STM: fpf-cap-single
 STM: fpf-val-single1
 ABS: $fx : v$ **fpf-add-single**
 STM: fpf-add-single_wf
 ABS: $\text{fpf-vals}(eq;P;f)$ **fpf-vals**
 STM: fpf-vals_wf
 STM: member-fpf-vals
 STM: member-fpf-vals2
 STM: filter-fpf-vals

STM: fpf-vals-singleton

STM: fpf-vals-nil

ABS: $\forall x \in \text{dom}(f). v = f(x) \Rightarrow P(x;v)$ **fpf-all**

STM: fpf-all_wf

ABS: $\text{fpf-map}(a, v, f(a;v);x)$ **fpf-map**

STM: fpf-map_wf

ABS: $\text{fpf-accum}(z, a, v, f(z;a;v);y;x)$ **fpf-accum**

STM: fpf-accum_wf

ABS: $\text{rename}(r;f)$ **fpf-rename**

STM: fpf-rename_wf

STM: fpf-rename-dom

STM: fpf-rename-dom2

STM: fpf-rename-ap

STM: fpf-rename-ap2

STM: fpf-rename-cap

STM: fpf-rename-cap2

STM: fpf-rename-cap3

ABS: $\text{fpf-inv-rename}(r;rinvs;f)$ **fpf-inv-rename**

STM: fpf-inv-rename_wf

ABS: $g \circ f$ **fpf-compose**

STM: fpf-compose_wf

ABS: $\text{compose-fpf}(a;b;f)$ **compose-fpf**

STM: compose-fpf_wf

STM: compose-fpf-dom

STM: fpf-sub-reflexive

ABS: $\text{mkfpf}(a;b)$ **mkfpf**

STM: mkfpf_wf

STM: fpf-join-compatible-left
STM: fpf-join-compatible-right
STM: fpf-compatible-self
STM: fpf-compatible-join
STM: fpf-compatible-join-iff
STM: fpf-compatible-symmetry
STM: fpf-disjoint-compatible
STM: fpf-compatible-join2
STM: fpf-compatible-singles
STM: fpf-compatible-singles-trivial
STM: fpf-single-dom
STM: fpf-single-dom-sq
STM: fpf-compatible-single
STM: fpf-compatible-single-iff
STM: fpf-compatible-single2
STM: fpf-compatible-singles-iff
STM: fpf-compatible-join-cap
STM: fpf-ap-equal
STM: fpf-join-dom-decl
STM: fpf-join-dom-da
STM: fpf-cap-join-subtype
STM: fpf-cap-join-subtype2
STM: fpf-all-empty
STM: fpf-all-single
STM: fpf-all-single-decl
STM: fpf-all-join-decl
ABS: non-void(d) **non-void-decl**

STM: non-void-decl_wf
 STM: non-void-decl-join
 STM: non-void-decl-single
 ABS: AtomFree(d) **atom-free-decl**
 STM: atom-free-decl_wf
 STM: atom-free-decl-join
 STM: atom-free-decl-single
 STM: fpf-empty-compatible-right
 STM: fpf-empty-compatible-left
 STM: fpf-compatible-triple
 ABS: fpf-dom-list(f) **fpf-dom-list**
 STM: fpf-dom-list_wf
 STM: member-fpf-dom
 ABS: lnk-decl($l; dt$) **lnk-decl**
 STM: lnk-decl_wf
 STM: lnk-decl-cap
 STM: lnk-decl-dom
 STM: lnk-decl-dom-not
 STM: lnk-decl-dom2
 STM: lnk-decl-cap2
 STM: lnk-decl-ap
 STM: lnk-decl-dom-implies
 STM: lnk-decl-compatible-single
 STM: lnk-decl-compatible-single2
 STM: lnk-decls-compatible
 STM: Ldisjoint-fpf-dom
 STM: Ldisjoint-fpf-join-dom

ABS: $\text{fpf}(L)$ **pairs-fpf**
 STM: pairs-fpf_wf
 STM: pairs-fpf_property
 STM: no_repeats-pairs-fpf
 STM: atom-free-fpf
 ABS: $\text{fpf-normalize}(eq;g)$ **fpf-normalize**
 STM: fpf-normalize_wf
 STM: fpf-normalize-dom
 STM: fpf-normalize-ap
 ABS: $\text{Valtype}(da;k)$ **ma-valtype**
 STM: ma-valtype_wf
 ABS: $\text{Msgtype}(da;k)$ **ma-msgtype**
 STM: ma-msgtype_wf
 ABS: $\text{State}(ds)$ **ma-state**
 STM: ma-state_wf
 STM: ma-valtype-subtype
 STM: ma-state-subtype
 STM: ma-state-subtype2
 ABS: $\text{dt}(l;da)$ **es-dt**
 STM: es-dt_wf
 STM: es-dt-dom
 STM: es-dt-ap
 STM: es-dt-cap
 ABS: $\text{Normal}(T)$ **normal-type**
 STM: normal-type_wf
 STM: normal-top
 ABS: $\text{Normal}(ds)$ **normal-ds**

STM: normal-ds_wf

STM: implies-normal-ds

STM: normal-ds-single

STM: normal-ds-join

ABS: Normal(*da*) **normal-da**

STM: normal-da_wf

STM: normal-da-single

STM: normal-da-join

STM: normal-valtype

STM: normal-cap-void

STM: normal-es-dt