Description logic view: DOLCE Spatial Relations

Classes

endurant

non-physical-endurant

perdurant

physical-endurant

space-region

spatio-temporal-particular

Object properties

approximate-location

$\sqsubseteq$ generic-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlapproximate-location¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/Spati...
location-of¿$^-$
$\exists$ approximate-location Thing $\sqsubseteq$ spatio-temporal-particular
$\top \sqsubseteq \forall$ approximate-location spatio-temporal-particular

approximate-location-of

$\sqsubseteq$ generic-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlapproximate-location¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/Spati...
location-of¿$^-$
$\exists$ approximate-location-of Thing $\sqsubseteq$ spatio-temporal-particular
$\top \sqsubseteq \forall$ approximate-location-of spatio-temporal-particular

d-spatial-location

$\sqsubseteq$ exact-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owld-spatial-location¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/SpatialRe...
spatial-location-of¿$^-$
$\exists$ d-spatial-location Thing $\sqsubseteq$ non-physical-endurant
$\top \sqsubseteq \forall$ d-spatial-location space-region

d-spatial-location-of

$\sqsubseteq$ exact-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owld-spatial-location¿ $\equiv$ ¡http://www.loa-cnr.it/ontologies/SpatialRe...
spatial-location-of¿$^-$
$\exists$ d-spatial-location-of Thing $\sqsubseteq$ space-region
$\top \sqsubseteq \forall$ d-spatial-location-of non-physical-endurant

descriptive-origin

⊑ descriptive-place
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owldescriptive-origin¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRe
origin-of¿⁻
∃ descriptive-origin Thing ⊑ endurant
⊤ ⊑ ∀ descriptive-origin non-physical-endurant

descriptive-origin-of

⊑ descriptive-place-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owldescriptive-origin¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRe
origin-of¿⁻
∃ descriptive-origin-of Thing ⊑ non-physical-endurant
⊤ ⊑ ∀ descriptive-origin-of endurant

descriptive-place

⊑ approximate-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owldescriptive-place-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialI
place¿⁻
∃ descriptive-place Thing ⊑ endurant
⊤ ⊑ ∀ descriptive-place non-physical-endurant

descriptive-place-of

⊑ approximate-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owldescriptive-place-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialI
place¿⁻
∃ descriptive-place-of Thing ⊑ non-physical-endurant
⊤ ⊑ ∀ descriptive-place-of endurant

exact-location

exact-location-of

generic-location

generic-location-of

material-place

⊑ place
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlmaterial-place-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRel
place¿⁻
∃ material-place Thing ⊑ physical-endurant
⊤ ⊑ ∀ material-place physical-endurant

material-place-of

⊑ place-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlmaterial-place-of¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRel
place¿⁻
∃ material-place-of Thing ⊑ physical-endurant
⊤ ⊑ ∀ material-place-of physical-endurant

origin

⊑ material-place
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlorigin¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlc
of¿⁻
∃ origin Thing ⊑ physical-endurant
⊤ ⊑ ∀ origin physical-endurant

origin-of

⊑ material-place-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlorigin¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlc
of¿⁻
∃ origin-of Thing ⊑ physical-endurant
⊤ ⊑ ∀ origin-of physical-endurant

p-spatial-location

⊑ exact-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlp-spatial-location¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRe
spatial-location-of¿⁻
∃ p-spatial-location Thing ⊑ perdurant
⊤ ⊑ ∀ p-spatial-location space-region

p-spatial-location-of

⊑ exact-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlp-spatial-location¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRe
spatial-location-of¿⁻
∃ p-spatial-location-of Thing ⊑ space-region
⊤ ⊑ ∀ p-spatial-location-of perdurant

participant-place

⊑ approximate-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlparticipant-place¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRel
place-of¿⁻
∃ participant-place Thing ⊑ perdurant
⊤ ⊑ ∀ participant-place endurant

participant-place-of

⊑ approximate-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlparticipant-place¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRel
place-of¿⁻
∃ participant-place-of Thing ⊑ endurant
⊤ ⊑ ∀ participant-place-of perdurant

physical-location

physical-location-of

place

⊑ approximate-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlplace¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlp
of¿⁻
∃ place Thing ⊑ endurant
⊤ ⊑ ∀ place physical-endurant

place-of

⊑ approximate-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlplace¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlp
of¿⁻
∃ place-of Thing ⊑ physical-endurant
⊤ ⊑ ∀ place-of endurant

spatial-location

⊑ physical-location
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlspatial-location¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRela
location-of¿⁻
∃ spatial-location Thing ⊑ physical-endurant
⊤ ⊑ ∀ spatial-location space-region

spatial-location-of

⊑ physical-location-of
¡http://www.loa-cnr.it/ontologies/SpatialRelations.owlspatial-location¿ ≡ ¡http://www.loa-cnr.it/ontologies/SpatialRela
location-of¿⁻
∃ spatial-location-of Thing ⊑ space-region
⊤ ⊑ ∀ spatial-location-of physical-endurant

Data properties

Individuals

Datatypes

string