

CapillaryPhys.hpp

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1 YADE_CLASS_BASE_DOC_ATTRS_DEPREC_INIT_CTOR_PY(CapillaryPhys,FrictPhys,"Physics (of interaction) for :yref:`Law
2 ((bool,meniscus,false,,"Presence of a meniscus if true"))
3 ((bool,isBroken,false,,"If true, capillary force is zero and liquid bridge is inactive.))
4 ((Real,capillaryPressure,0.,,"Value of the capillary pressure Uc defines as Ugas-Uliquid")
5 ((Real,vMeniscus,0.,,"Volume of the meniscus"))
6 ((Real,Delta1,0.,,"Defines the surface area wetted by the meniscus on the smallest grains of radius R1 (R1<R2)
7 ((Real,Delta2,0.,,"Defines the surface area wetted by the meniscus on the biggest grains of radius R2 (R1<R2)"
8 ((Vector3r,fCap,Vector3r::Zero()),,"Capillary Force produces by the presence of the meniscus"))
9 ((short int,fusionNumber,0.,,"Indicates the number of meniscii that overlap with this one"))
10 ,/*deprec*/
11 ((Fcap,fCap,"naming convention"))
12 ((CapillaryPressure,capillaryPressure,"naming convention"))
13 ,,
14 createIndex();currentIndexes[0]=currentIndexes[1]=currentIndexes[2]=currentIndexes[3]=0;
15 ,
16 );
17 REGISTER CLASS INDEX(CapillaryPhys,FrictPhys);
18
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MindlinCapillaryPhys.hpp

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1 YADE_CLASS_BASE_DOC_ATTRS_DEPREC_INIT_CTOR_PY(MindlinCapillaryPhys,MindlinPhys,"Adds capillary physics to Min
2 ((bool,meniscus,false,,"Presence of a meniscus if true"))
3 ((bool,isBroken,false,,"If true, capillary force is zero and liquid bridge is inactive.))
4 ((Real,capillaryPressure,0.,,"Value of the capillary pressure Uc defines as Ugas-Uliquid")
5 ((Real,vMeniscus,0.,,"Volume of the meniscus"))
6 ((Real,Delta1,0.,,"Defines the surface area wetted by the meniscus on the smallest grains of radius R1 (R1<R2)
7 ((Real,Delta2,0.,,"Defines the surface area wetted by the meniscus on the biggest grains of radius R2 (R1<R2)"
8 ((Vector3r,fCap,Vector3r::Zero()),,"Capillary Force produces by the presence of the meniscus"))
9 ((short int,fusionNumber,0.,,"Indicates the number of meniscii that overlap with this one"))
10 ,/*deprec*/
11 ((Fcap,fCap,"naming convention"))
12 ((CapillaryPressure,capillaryPressure,"naming convention"))
13 ,,createIndex();currentIndexes[0]=currentIndexes[1]=currentIndexes[2]=currentIndexes[3]=0;
14 ,
15 );
16 REGISTER CLASS INDEX(MindlinCapillaryPhys,MindlinPhys);
17
```