

Physics

-num_species: integer
-num_dim: integer
-min_phys: real(:),pointer
-max_phys: real(:),pointer
-num_part_dim: integer(:),pointer
-num_part_tot: integer
-dh: real(:), pointer
-cut_off: real
-dt: real
-time_start: real
-time_end: real
-step_start: integer
-step_end: integer
-rho: real
-eta: real
-ksai: real
-temp: real
-c: real
-p0: real
-rho0: real
-gamma: real
-bodyforce: real(:),pointer
-num_colloid: integer
-colloid: Colloid
-bcdef: integer(:),pointer

+physics_new()
-physics_init_default(out this:Physics,out stat_info:integer)
+physics_init_copy(out this:Physics,in that:Physics,out stat_info:integer)
+physics_check_paramters(in this:Physics,out stat_info:integer): logical
+physics_adjust_parameters(in this:Physics,out stat_info:integer)
+physics_finalize(in this:Physics,out stat_info:integer)
+physics_display_parameters(in this:Physics,out stat_info:integer)
+physics_get_num_species(in this:Physics,out stat_info:integer): integer
+physiscs_get_num_dim(in this:Physics,out stat_info:integer): integer
+physics_get_min_phys(in this:Physics,out d_min_phys:real(:),pointer,out stat_info:integer)
+physics_get_max_phys(in this:Physics,out d_max_phys:real(:),pointer,out stat_info:integer)
+physics_get_num_part_dim(in this:Physics,inout d_num_part_dim:integer(:),pointer,
out stat_info:integer)
+physics_get_num_part_tot(in this:Physics,out stat_info_sub:integer)
+physics_get_dh(in this:Physics,d_dh:real(:),pointer,out stat_info:integer)
+physics_get_cut_off(in this:Physics,out stat_info:integer): real
+physics_get_dt(in this:Physics,out stat_info:integer): real
+physics_get_time_start(in this:Physics,out stat_info:integer): real
+physics_get_time_end(in this:Physics,out stat_info:integer): real
+physics_get_step_end(in this:Physics,out stat_info:integer): integer
+physics_get_step_start(in this:Physics,out stat_info:integer): integer
+physics_get_rho(in this:Physics,out stat_info:integer): real
+physiscs_get_eta(in this:Physics,stat_info:integer): real
+physics_get_ksai(in this:Physics,out stat_info:integer): real
+physics_get_temp(in this:Physics,out stat_info:integer): real
+physics_get_c(in this:Physics,out stat_info:integer): real
+physics_get_p0(in this:Physics,out stat_info:integer): real
+physics_get_rho0(in this:Physics,out stat_info:integer): real
+physics_get_gamma(in this:Physics,out stat_info:integer): real
+physics_get_bodyforce(in this:Physics,out d_bodyforce:real(:),pointer,out stat_info:integer)
+physics_get_num_colloid(in this:Physics,stat_info:integer): integer
+physics_get_colloid(in this:Physics,out d_colloid:Colloid,pointer,out stat_info:integer)
+physics_get_bcdef(in this:Physics,out d_bcdef:integer(:),pointer,out stat_info:integer)
+physics_set_num_species(out this:Physics,in d_num_species:integer,out stat_info:integer)
+physics_set_num_dim(inout this:Physics,in d_num_dim:integer,out stat_info:integer)
+physics_set_min_phys(inout this:Physics,in min_phys:real(:),out stat_info:integer)
+physics_set_max_phys(inout this:Physics,in d_max_phys:real(:),stat_info:integer)
+physics_set_num_part_dim(inout this:Physics,in d_num_part_dim:integer(:),out stat_info:integer)
+physics_set_num_part_tot(inout this:Physics,in d_num_part_tot:integer,out stat_info:integer)
+physics_set_dh(inout this:Physics,in d_dh:real(:),out stat_info:integer)
+physics_set_cut_off(inout this:Physics,in d_cut_off:real,out stat_info:integer)