Kernel
Class_Kernel

-num_dim: integer
-kernel_type: integer
-smooth_length: real

+kernel_new()
-kernel_init(out this:Kernel,in d_num_dim:integer,in d_kernel_type:integer,
            in d_smooth_length:real,out stat_info:integer)
+kernel_kernel(in this:Kernel,in rij:real,out w:real,out gradw:real,
            out stat_info:integer)
-kernel_quintic_spline_3d(in this:Kernel,in rij:real,out w:real,
                        out gradw:real,out stat_info:integer)
+kernel_display_parameters(in this:Kernel,out stat_info:integer)
+kernel_finalize(in this:Kernel,out stat_info:integer)
+kernel_get_kernel_type(in this:Kernel,out stat_info:integer): integer
+kernel_get_smooth_length(in this:Kernel,out stat_info:integer): real
+kernel_get_num_dim(in this:Kernel,out stat_info:integer): integer