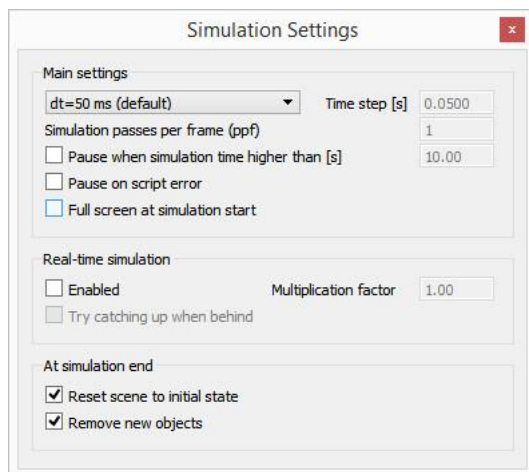# Simulation dialog

模擬控制視窗

The simulation dialog can be accessed with [Menu bar --> Simulation --> Simulation settings] or by clicking following toolbar button:

可以通過[菜單欄->模擬->模擬設置]或單擊以下工具欄按鈕來訪問模擬對話框：

  [Simulation toolbar button]

[模擬工具欄按鈕]

[Simulation settings dialog]

模擬設定視窗

Time step: the simulation time step. Each time the main script was executed, the simulation time is incremented by the simulation time step. Using large time steps results in fast but inaccurate/unstable simulations. Small time steps on the other hand will (generally) lead to more precise simulations, but will take more time. It is highly recommended to keep a default time step.

Simulation passes per frame (ppf): the number of simulation passes for one rendering pass. A value of 10 would mean that the main script is executed 10 times (10 simulation steps) before the screen is refreshed. If you have a slow graphic card, you can choose to display only one frame out of two for instance.

Pause when simulation time higher than: allows specifying a simulation time at which the simulation will be paused (e.g. to be able to analyze some results at a specific simulation time).

Pause on script error: if enabled, then a simulation will be paused when a script error occurs.

時間步長：模擬時間步長。每次執行主腳本時，模擬時間都會增加模擬時間的步

長。使用較大的時間步長會導致快速但不准確/不穩定的模擬。另一方面，較小的時間步長（通常）會有更精確的模擬，但是會花費更多時間。強烈建議保留默認的時間步長。

每幀模擬次數（ppf）：一個渲染遍的模擬次數。其值為 10 表示刷新屏幕之前，主腳本已執行 10 次（10 個模擬步驟）。如果您的顯示卡較慢，則可以選擇僅顯示兩幅中的一幅。

當模擬時間高於以下時間時則會暫停：允許指定暫停模擬的模擬時間（例如，能夠在特定模擬時間分析某些結果）。

腳本錯誤暫停：如果啟用，則在腳本錯誤發生時暫停模擬。

Full screen at simulation start: if enabled, then simulation starts in full screen mode. Be aware that in full screen mode, dialogs and messages won't appear or won't be visible, and only the left mouse button will be active. For that reason that mode is only recommended once a scene is properly configured and final. Full screen mode can be left with the esc-key, and toggled via the boolean parameter sim_booparam_fullscreen during simulation. Unler Linux and MacOS the full-screen mode might only partially be supported, and switching back to normal mode might fail on certain systems.

模擬開始時全屏：如果啟用，則模擬以全屏模式開始。請注意，在全屏模式下，設置視窗和消息將不會出現或不可見，只有鼠標左鍵處於活動狀態時才會出現。因此，僅在正確配置場景並最終確定場景後才建議使用該模式。可以使用 esc 鍵保留全屏模式，並在模擬過程中通過布爾參數 sim_booparam_fullscreen 進行切換。Unler Linux 和 MacOS 可能僅部分支持全屏模式，並且在某些系統上切換回普通模式可能會失敗。

Real-time simulation, multiplication factor: if selected, then the simulation time will try to follow the real-time. A multiplication factor of X would try to run a simulation X times faster than real-time.

實際時間的模擬，倍增係數：如果選擇，則模擬時間將嘗試跟隨實際時間。 X 的乘數將使模擬運行比實時快 X 倍。

Try catching up when behind: during real-time simulation, it can happen that the simulation time is not able to follow the real-time (e.g. because of some momentarily heavy calculations). In that case, if this check-box is selected, then the simulation time will try catching up the lost time (e.g. when the calculation load is again reduced), which results in an apparent speed-up.

在落後時嘗試趕上：在實時模擬過程中，模擬時間可能無法實時跟踪（例如，由於某些瞬間繁重的計算）。在這種情況下，如果選中此複選框，則模擬時間將嘗試趕上不足的時間（例如，當計算負載再次減少時），從而明顯加快速度。

Reset scene to initial state: when selected, then all objects will be reset to their initial state: this includes the object local position, local orientation and its parent (as long

as the object wasn't modified otherwise (e.g. scaled)), joint and path intrinsic positions, floating view positions and sizes, etc. This means that the next simulation run will execute in a same way as previous one, unless heavy changes were undertaken (shape scaling, object removal, etc.). Some minor settings are ignored by this item.

將場景重置為初始狀態：選中後，所有物件都將重置為其初始狀態：包括對象的局部位置，局部方向及其父對象（只要未進行其他修改（例如，縮放），以及路徑的固有位置，浮動視圖的位置和大小等。這意味著除非進行了重大更改（形狀縮放，對象移除等），否則下一次模擬運行將以與上一次相同的方式執行。此項目將忽略一些次要設置。

Remove new objects: when selected, then scene objects added during a simulation run will be removed at the end of the simulation.

刪除新對象：選中後，在模擬運行期間添加的場景對象將在模擬結束時被刪除。