

Table S1. System Parameters

	Proposed control		MPPT technique	
	P_s	Q_s	DPC-PI	DPC-PDI-PWM
Kp	100	100	-0.826	-0.826
Ki	1000	1000	0.639	0.639

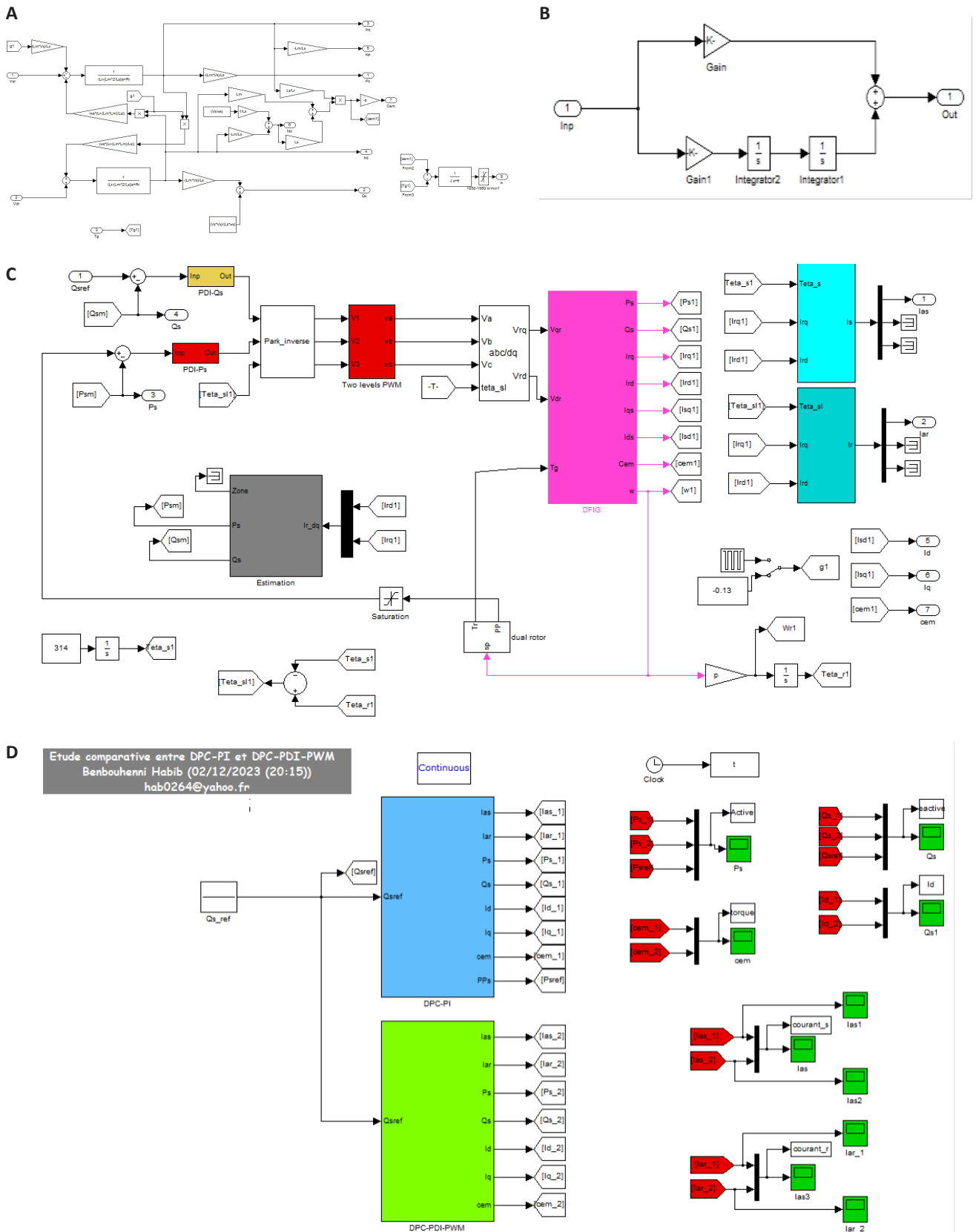


Figure S1. Proposed control in MATLAB environment. A: DFIG model; B: Proposed PDI controller; C: Proposed control; D: Two control strategies.