

# PWARI-G Force Unification Summary

## 1 Introduction

PWARI-G (Photon Wave Absorption and Reshaping Interpretation with Gravity) proposes that all known forces arise from the dynamics of a continuous breathing field, rather than from discrete particles or separate force-carrying fields.

All forces are manifestations of different breathing field behaviors:

- Gravity: breathing tension curvature of spacetime
- Electromagnetism: traveling breathing amplitude and twist oscillations
- Strong Force: breathing flux-tube confinement between solitons
- Weak Force: breathing phase instability and decay events

## 2 Gravity from Breathing Tension

Aspect	Breathing Field Explanation
Source	Stress-energy tensor $T_{\mu\nu}$ from breathing field $\Psi$ dynamics
Mechanism	Breathing energy density and tension curve spacetime (Einstein field equations)
Result	Gravitational attraction and cosmic expansion emerge naturally

$$G_{\mu\nu} = 8\pi G T_{\mu\nu}(\Psi) \quad (1)$$

## 3 Electromagnetism from Breathing Oscillations

Aspect	Breathing Field Explanation
Source	Oscillations in breathing amplitude ( $\phi$ ) and breathing twist ( $\theta$ )
Mechanism	Mutual propagation of amplitude and twist creates real traveling light waves
Result	Classical electromagnetism emerges without separate E and B fields

Wave equations:

$$(\square + m^2)\delta\phi = 0 \quad (2)$$

$$\square\delta\theta = 0 \quad (3)$$

4 Strong Force from Breathing Flux-Tubes

Aspect	Breathing Field Explanation
Source	Compressed breathing field tension between solitons (flux-tube structures)
Mechanism	Linear breathing energy increase with separation causes confinement
Result	Color confinement and strong nuclear binding naturally explained

Energy scaling:

$$E_{\text{conf}} = \kappa r \tag{4}$$

where  $r$  is soliton separation,  $\kappa$  is breathing tension coefficient.

5 Weak Force from Breathing Phase Instabilities

Aspect	Breathing Field Explanation
Source	Local breathing phase shifts and instability transitions in solitons
Mechanism	Breathing reconfiguration causes decay and emission of breathing disturbances
Result	Particle flavor changes and decay processes (e.g., neutron decay) emerge naturally

Decay process example:

$$\Psi_{\text{unstable}} \rightarrow \Psi_{\text{stable}} + \delta\phi + \delta\theta \tag{5}$$

(Initial unstable breathing soliton decays into lower-energy breathing solitons and ripples.)

6 Summary Table: Force Unification

Force	Standard Model Mechanism	PWARI-G Breathing Field Mechanism
Gravity	Curved spacetime from mass-energy	Curved spacetime from breathing tension
Electromagnetism	Exchange of photons (E and B fields)	Breathing amplitude and twist oscillations
Strong Force	Gluon-mediated color confinement	Breathing field flux-tube tension locking solitons
Weak Force	W/Z boson-mediated decay	Breathing phase instability transitions

- ✓ All forces emerge naturally from breathing field dynamics
- ✓ No infinities, no magic particles, no external fields required