

## Curriculum Vitae

Of

Susan Wassem Samwel Stefan



**Surname** : Samwel  
**First name** : Susan, Wassem  
**Permanent Address** : ٤٨ Kablat st., Wadi-Hof-Helwan, Egypt.  
**Tel.** : (٠٠٢)(٠٢) ٢٣٦٩٢٩٣.  
**Fax** : (٠٠٢)(٠٢) ٢٥٥٤٨٠٢.  
**E-mail** : [samwelsw@nriag.sci.eg](mailto:samwelsw@nriag.sci.eg)  
[s\\_w\\_samwel@yahoo.com](mailto:s_w_samwel@yahoo.com)  
[samwelsw@yahoo.com](mailto:samwelsw@yahoo.com)

**Mailing Address** : National Research Institute of Astronomy and Geophysics, Helwan, Egypt, mailing box: ١١٤٢١.

**Place and Birth Date** : ١٠-٢-١٩٧٨, Cairo, Egypt

**Nationality** : Egyptian

**Marital Status** : Single

**Employment** :

- Researcher in Space Research Lab., National Research Institute of Astronomy and Geophysics (NRIAG), Helwan- Egypt, April, ٢٠٠٩.
- Assistant Researcher in Space Research Lab., National Research Institute of Astronomy and Geophysics (NRIAG), Helwan- Egypt, June, ٢٠٠٤.
- Researcher Assistant in Space Research Lab., National Research Institute of Astronomy and Geophysics (NRIAG), Helwan- Egypt, October, ١٩٩٩.

### **Academic Qualifications :**

- ١- **Ph.D** Cairo University, April, ٢٠٠٩
- ٢- **M.Sc** Cairo University, May, ٢٠٠٤.
- ٣- **B.Sc** in (Physics- Astronomy)- Cairo university, May, ١٩٩٩

### **Research Fields of Interest:**

- Space Physics, Space Weather, Solar physics, Satellite Tracking

### **Personal Service:**

- Membership of an Egyptian-French Project (IMHOTEP project) entitled "Supporting New Ground-based solar observations ", ٢٠٠٦-٢٠٠٨.
- Membership of "Egyptian Society of Astronomy"
- Member of the Local Organizing Committee (LOC), IAU٢٣٣, Cairo, Egypt, ٢٠٠٦
- Member of the Local Organizing Committee (LOC), MEARIM, Cairo, Egypt ٢٠٠٨
- Member of the Local Organizing Committee (LOC), IAGA, Cairo, Egypt, ٢٠٠٨
- Member of the Local Organizing Committee (LOC), ACAG-١, Helwan, Egypt ٢٠٠٨
- Membership of the Local Organizing Committee (LOC), IAGA٢, Solar Wind, Space Weather Interaction", Cairo, Egypt, ٢٠٠٩
- Membership of an Egyptian-French Project (IMHOTEP project) entitled "High Energy

**Particles from the Sun: Study and development of methods for their prediction", ٢٠١٠-٢٠١٢.**

**Scientific missions**

- Paris Observatory, Meudon, France, ٢٠٣٠/٦/٢٠٠٩.
- Paris Observatory, Meudon, France, ١٣/٩/٢٠١٠ till ١٦/١٠/٢٠١٠.

**Conferences and Workshops:**

- ١- ١<sup>st</sup> International conference on Engineering, Mathematics, and physics (EMP), May ١٤-١٦, Military Technical College, Cairo-Egypt, ٢٠٠٢.
- ٢- ٩<sup>th</sup> General Scientific Meeting of NRIAG, Dec., ٢٠٠٢
- ٣- ١٠<sup>th</sup> General Scientific Meeting of NRIAG, Dec., ٢٠٠٤
- ٤- IAU Symposium ٢٣٣, "Solar Activity and its magnetic Origin", Cairo, Egypt, March ٣١- April ٤, ٢٠٠٦
- ٥- ١١<sup>th</sup> General Scientific Meeting of NRIAG, Dec., ٢٠٠٦
- ٦- First Middle East-Africa, Regional IAU Meeting, Cairo, Egypt, April ٥-١٠, ٢٠٠٨
- ٧- International Association of Geomagnetism and Aeronomy, (IAGA)" Space weather and its effects on Spacecraft" Cairo, Egypt, October ٥-١٠, ٢٠٠٨
- ٨- The ١<sup>st</sup> Arab Conference on Astronomy and Geophysics (ACAG-١) Helwan, Cairo, Egypt, October ٢٠-٢٢, ٢٠٠٨.
- ٩- Workshop on "Future de la radioastronomie solaire en France", Meudon observatoire, Meudon, France, ٢٩-٣٠ June, ٢٠٠٩.
- ١٠- International Association of Geomagnetism and Aeronomy, IAGA٢, "Solar Wind, Space Weather Interaction", Cairo, Egypt, December, ٤-٨, ٢٠٠٩.
- ١١- The Second IHY International Workshop on Advancing Very Low Frequency (VLF) Science Through the Global AWESOME Network", Sharjah, UAE, February ٢٢-٢٤, ٢٠١٠.

١٢- CESRA summer school on solar radio physics ٢٠١٠, Nancy Radio Observatory (France), on ٢٠-٢٤ September ٢٠١٠.

١٣- ٢nd Arab Conference on Astronomy and Geophysics ACAG-٢, ٢٥-٢٨ October ٢٠١٠.

### Training Courses

١- TOEFL, ٢٠٠٤

٢- Training course for "Web Page", Central Agency for Organization and Management-Cairo- Egypt, ٢٠٠٧.

### M.Sc. Dissertation:

"Comparative studies of some artificial satellites observations and fitting the output data using Spline technique", Cairo University, May ٢٠٠٤.

### Ph.D Dissertation

"Space Environment and its effect on Spacecrafts", Cairo University, April, ٢٠٠٩

### Publications:

١- **Samwel, S.W.**, Hanna, Yousry S., Ibrahim, Makram, and Fahim, G., "An application on Spline technique for fitting Helwan-SLR data", Proceeding of the ١st International conference on Engineering, Mathematics, and physics (EMP), May ١٤-١٦, Military Technical College, Cairo-Egypt, pp.٨٠- ٨٩, ٢٠٠٢.

٢- Hanna, Yousry S., Ibrahim, Makram and **Samwel, S.W.** ,"On Using Chebyshev Polynomials For Fitting SLR Data Of Artificial Satellites", Journal of Applied Mathematics and Computation (AMC), ١٥٨ pp. ٦٥٥-٦٦٦, ٢٠٠٤

٣- Ibrahim, Makram, Hanna, Yousry S., and [Samwel, S.W.](#), "Statistical and comparative studies for the observations of Helwan-SLR station", Journal of Nonlinear Sciences and Numerical Simulation, ٥(٢), ١٣٥-١٤٧, ٢٠٠٤.

٤- [Samwel, S.W.](#), Hanna, Yousry S., and Ibrahim, Makram, "On Applying The Spline Technique For Fitting Different Kinds Of Data", NRIAG Journal of Astronomy and Astrophysics, Special Issue, pp. ٣٣٥-٣٤٥, ٢٠٠٤.

٥- [Samwel, S.W.](#), Metwally, Z., Mikhail, J. S., Hanna, Yousry S., and Ibrahim, Makram, "Analyzing The Range Residuals Of The SLR Data Using Two Different Methods" , NRIAG journal of Astronomy and Astrophysics , vol. ٤, No. ١, pp ١-١٤, ٢٠٠٥.

٦- [Samwel, S.W.](#), Hady, A.A., Ibrahim, Makram, Hanna, Yousry S., "Studying the great solar proton events during the solar cycle ٢٣", Proceeding of IAU٢٣٣ symposium, "Solar Activity and its Magnetic Origin", Cambridge University, pp.٢٨٧-٢٩٠, ٢٠٠٦.

٧- [Samwel, S.W.](#), Garrett, H.B., Hanna, Y.S., Ibrahim Makram, Mikhail, J.S., and Hady, A.A., "Comparative Study of The Energetic Particle Fluences For Different Orbital Trajectories", NRIAG journal of Astronomy and Astrophysics, No.١١, pp.١٣٩-١٥٠, ٢٠٠٦.

٨- [Samwel, S.W.](#), Hady, A.A. , Mikhail, J.S. , Hanna, Y.S. , and Ibrahim, Makram, "Analysis of the space radiation environment of EGYPTSAT-١ satellite", presented in the IAGA International Symposium "Space weather and its effects on Spacecraft", Cairo, Egypt, ٢٠٠٨.

٩- **Samwel, S.W.**, Hady, A.A. , Mikhail, J.S. , Hanna, Y.S. , and Ibrahim, Makram, "Studying the space solar cell power performance for different orbital trajectories", The ١<sup>st</sup> Arab Conference on Astronomy and Geophysics (ACAG-١) Helwan, Cairo, Egypt, October ٢٠-٢٢, ٢٠٠٨, NRIAG journal of Astronomy and Astrophysics, Special Issue, PP.٢١٩-٢٣١, ٢٠٠٨

١٠- **Samwel, S.W.**, Hady, A.A. , Mikhail, J.S., Ibrahim, Makram , and Hanna, Y.S., "Studying the Total Ionizing Dose and Displacement Damage Dose effects for various orbital trajectories", Proceeding of the First Middle East-Africa, Regional IAU Meeting, pp ٥٥-٥٨, ٢٠٠٨.

١١- **Samwel, S.W.**, Hady, A.A, Mikhail, J.S., Ibrahim, Makram, and Hanna, Y.S, "Assessment of GaAs, InP, and GaInP/GaAs/Ge solar cells performance in different radiation environments", Proceeding of the First Middle East-Africa, Regional IAU Meeting, pp ٢٠١-٢٠٣, ٢٠٠٨.

١٢- **Samwel, S.W.** and Hady, A.A., "Space Radiation Environment forecast for Egiptsat-٢ satellite", SPACE WEATHER, VOL. ٧, S١٢٠٠٤, doi:١٠.١٠٢٩/٢٠٠٩SW٠٠٠٤٨٢, ٢٠٠٩.

١٣- K.-L. Klein, **S.W.Samwel**, G. Trottet: "Strong X-ray bursts and solar energetic particle events", General Assembly of the European Geosciences Union (EGU), Vienna (Austria), May ٢-٧, ٢٠١٠.

١٤- **S.W. Samwel**, K.-L. Klein, G. Trottet, A. Klassen: "Strong solar X-ray bursts without solar energetic particle events", COSPAR General Assembly, Bremen (Germany), July ١٨-٢٥, ٢٠١٠.

١٥- K.-L. Klein, G. Trottet, [S.W.Samwel](#), O. Malandraki, "Particle Acceleration and Propagation in Strong Flares without Major Solar Energetic Particle Events", submitted to the Solar Physics journal, October ٢٠١٠.

١٦- Yousry S.Hanna, Makram Ibrahim, [Samwel, S.W.](#) "Comparative Studies of Overlap and Spline Techniques for Fitting SLR Data", presented in ٢<sup>nd</sup> Arab Conference on Astronomy and Geophysics (ACAG-٢), Cairo, Egypt, October ٢٥-٢٨, ٢٠١٠.

١٧- [Samwel, S.W.](#), "Study of LEO atomic oxygen effect on spacecraft materials, Presented in ٢<sup>nd</sup> Arab Conference on Astronomy and Geophysics (ACAG-٢), Cairo, Egypt, October ٢٥-٢٨, ٢٠١٠.