**“Torah is Light:” Quantum Physics & the Power of Torah**

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If you’ve ever been to Israel for Chanukah, you may see Eged busses with signs that proudly proclaim “*Chag Urim Sameach*,” “Happy Festival of Lights.” This name for the holiday can be traced back to Josephus[[1]](#endnote-1) and draws its name from the miracle of the oil in the Beis Hamikdash which lasted for eight days. The miracle was a sign that God was pleased with the Jews’ efforts to rededicate the Temple and their commitment to His Torah.[[2]](#endnote-2) The Sages often comment[[3]](#endnote-3) that the Menorah and its light symbolize the Torah. As proof, they quote the words of King Solomon in Proverbs (6:23) that the “Torah is light.” There are many interpretations as to what this description means, but I would like to advance one in light (pun intended) of modern physics.

Quantum mechanics argues that light behaves like both a wave and a particle. On the one hand, light is an energy wave that can transfer from one object to another. The larger the energy wave, the brighter its glow. Similarly, Torah is not merely a body of knowledge like other intellectual and scholarly pursuits. It transforms and sanctifies one’s essence,[[4]](#endnote-4) enabling and empowering those who study it to personalize their connection to Hashem. The more Torah one studies – the greater the wave of Torah that flows through a person – the more he or she will “get to know” Hashem and thus be able to personalize their relationship with Him.

At the same time, light also acts like a particle. Physicist Max Planck showed that unlike a wave of water or sound, light’s energy can only be transferred in rigid, discrete amounts (“quanta”). Similarly, the spiritual energy of Judaism is transferred through the circumscribed words of the Torah and mitzvos contained therein.[[5]](#endnote-5) It is only within the bounds of Torah and mitzvos that personal spiritual growth and transcendence can be achieved.

While at first glance this dynamic may seem constricting, the opposite is actually correct. Planck proved that as long as the light particles are the right size, the same amount of energy can be transferred irrespective of how bright (or large the wave of) the light is. The same is true of Torah. Every mitzvah we do and every word of Torah we learn, no matter how thick the darkness might be, has an immeasurable impact on ourselves and the world around us. Every Jew has a divine spark in their soul,[[6]](#endnote-6) and even a single quantum of authentic spiritual light is capable of setting it aflame.

For over two thousand years, Jews have kindled menorahs in the darkness of exile, illuminating the world around them. When we light the Chanukah menorah, we reaffirm our faith and commitment to the duality of Torah as a transformative and immutable force, capable of inspiring the world with its timeless laws and values and thereby empowering each Jew to harness their passion and talents to forge a unique, intimate relationship with Hashem. May we merit to light the menorah this year in health and happiness, be illuminated by its light, and ultimately witness the kindling of the menorah in the Beis Hamikdash speedily in our days.

1. Antiquities of the Jews 12.7.7 [↑](#endnote-ref-1)
2. See Rashi Shabbos 25 [↑](#endnote-ref-2)
3. For example, see Brachos 57a [↑](#endnote-ref-3)
4. See Brachos 8b [↑](#endnote-ref-4)
5. See Nachmanides Introduction to Commentary on the Torah and Brachos 55a [↑](#endnote-ref-5)
6. See Tanya Likkutei Amarim 32 [↑](#endnote-ref-6)